Data formatting glitches and other migration issues hamper San Antonio's new SAP-based payroll system. PAGE 7

Dell exec Jeff Clarke says the computer maker doesn't see any reason to jump on the Opteron bandwagon. PAGE 14

COMPUTERWORLD

THE VOICE OF IT MANAGEMENT ■ WWW.COMPUTERWORLD.COM

FEBRUARY 21, 2005 ■ VOL. 39 ■ NO. 8 ■ $5/COPY

KNOWLEDGE CENTER **IT MANAGEMENT**

SPECIAL REPORT It's time to take control of your vendor relationships, or the vendors will control you. Learn how to set up a vendor management office, negotiate better deals and screen those sales calls. Stories begin on page 35.

JOHN CARLSON

Guide to Managing Vendors

ONLINE: Visit Computerworld.com to download PowerPoint slides that provide tips on hardball negotiating tactics. QuickLink a5460

E-health Records Slow To Catch On

High costs, lack of standards for exchanging data hold up plan for national health network

BY HEATHER HAVENSTEIN
DALLAS

Interoperability problems and lagging adoption of electronic health record technology are challenging the federal government's efforts to foster the creation of a national information health network, said the Bush administration's point man for health care IT last week.

Health care IT managers countered that they need incentives to offset the hefty capital investment necessary to computerize health records, as well as nationwide standards to ease the exchange of data with other health care organizations.

Speaking at the Healthcare Information and Management Systems Society Conference here, David Brailer, the country's first coordinator for health information technology, said the variability in EHR adoption by health care providers poses challenges to the goal of building a nationwide infrastructure to exchange health care data electronically.

BRAILER: EHR adoption is too sporadic.

Brailer announced that his office has formed a 100-member task force drawn from

E-health, page 16

Linux Starts to Take a More Central IT Role

Open-source OS gets increased use for databases, key apps

BY CAROL SLIWA
BOSTON

IT managers who once used Linux chiefly to support Web and file-and-print servers said at last week's LinuxWorld Conference & Expo here that they're now running key applications and databases on Linux-based systems — a sign that the open-source software is penetrating deeper into corporate enterprises.

"It's as deep as it will get for us. It's what we're betting the data center on," said Jon Fraley, a Linux administrator at Glen Raven Inc. In December, the Glen Raven, N.C.-based textile manufacturer finished moving mission-critical Oracle databases from an aging 24-CPU Hewlett-Packard server running Unix to four-way HP servers that are based on Intel Xeon processors and run Red Hat Inc.'s Linux distribution.

Reports that once took five to six minutes to produce are now ready in 30 seconds, Fraley said. He noted that the replacement servers cost less than the support fees for the old hardware. The Linux-based hardware "proved itself," he said, adding that more

Linux, page 49

MORE INSIDE

Demand for IT Certifications On the Rise

BY THOMAS HOFFMAN

Rising corporate IT spending is leading to increased demand for workers with certifications in information security, project management and other disciplines, CIOs and IT labor experts said last week.

"We're very interested in project management certifications," said Dan Garrow, senior vice president of information systems and CIO at Mohegan Sun Casino in Uncasville, Conn. Although certifications don't necessarily guarantee quality or a level of expertise, they are a step in the right direction, he said.

ONLINE
Read more IT careers stories on our Web site: a2140

Certifications, page 16

NEWSPAPER

EXIT

Adobe® Intelligent Document Platform

How did 80% of information become 100% useless?

What if information could find its way in and out of databases, all on its very own? With the Adobe Intelligent Document Platform, it's possible. When you combine the logic of XML and Adobe PDF, suddenly documents are smarter. Unstructured content unifies with structured data. And information intuitively travels where it's needed, safely and securely. It's simplicity at work. The Intelligent Document Platform. Better by Adobe.

See how smarter documents are working for other companies at adobe.com/idp.

Adobe

Oracle Database

World's #1 Database Now For Small Business

Easy to use. Easy to manage. Easy to buy at Dell.
Only $149 per user.

ORACLE®

dell.com/database
or call 1.888.889.3982

Terms, conditions and limitations apply. Pricing, specifications, availability and terms of offers may change without notice. Taxes, fees and shipping charges extra, vary and are not subject to discount. U.S. Dell Small Business new purchases only. Dell cannot be responsible for pricing or other errors. Oracle Database Standard Edition One is available with Named User Plus licensing at $149 per user with a minimum of five users or $4995 per processor. Licensing of Oracle Standard Edition One is permitted only on servers that have a maximum capacity of 2 CPUs per server.
For more information, visit oracle.com/standardedition

Copyright © 2004, Oracle. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

CONTENTS

02.21.05

Meet Me in Cyberspace
In this week's Technology section: Once just a stopgap to save money and time on travel, virtual meetings are becoming one of the first choices for productivity and knowledge management in many situations. **Page 23**

The IT Strategic Plan
In the Management section: Former CIO Doug Lewis tells how to build a plan that will make sense, make you friends in the business and make a difference. **Page 31**

NEWS

6 **Use of handhelds** creates a security risk, so companies should adopt formal policies for their use, say RSA Conference attendees.

7 **An SAP-based payroll system** is causing headaches for members of San Antonio's police union, which is calling on the city to fix or ditch the system.

10 **A House committee** gives federal agencies a D+ average grade in IT security, but chief information security officers say the grading criteria are flawed.

12 **Telecom mergers,** such as the Verizon/MCI deal, inspire user hopes of improved industry stability and simplified service. But some worry about transition issues.

14 **Global Dispatches:** A legislator proposes adding data privacy rights to Japan's constitution; and the EU agrees to remove regulatory barriers to VoIP.

19 **A health care CIO** tests RFID technology — on himself.

ONLINE

ONLINE DEPARTMENTS

Breaking News
QuickLink a1510

Newsletter Subscriptions
QuickLink a1430

Knowledge Centers
QuickLink a2570

Computerworld Store
QuickLink a2420

What's a QuickLink?
On some pages in this issue, you'll see a QuickLink code pointing to additional, related content on our Web site. Just enter that code into our QuickLink box, which you'll see at the top of each page on our site.

OPINIONS

8 **On the Mark: Mark Hall** reports that some companies are offering insurance policies and investigative services designed to stop the gray market in IT gear on eBay.

20 **Don Tennant** says universities are finally starting to graduate students who have both business and IT skills. The failure to do so has frustrated IT execs for years.

20 **Virginia Robbins** reviews three steps to identifying problems, which is the first step toward eliminating them.

21 **Michael Gartenberg** has advice on what technology to take on the road.

28 **Robert L. Mitchell** didn't need to read a recent study to know that municipalities providing wireless broadband access is a bad idea.

33 **Barbara Gomolski** warns IT groups to be prepared to live up to the "customer-centric" label if that's how they're going to tout themselves.

50 **Frankly Speaking: Frank Hayes** thinks there's a career lesson for you in the messy departure of Carly Fiorina from Hewlett-Packard.

DEPARTMENTS/RESOURCES

At Deadline Briefs 6
News Briefs 8, 12
Letters 21
IT Careers 45
Company Index 48
How to Contact CW 48
Shark Tank 50

KNOWLEDGE CENTER
IT MANAGEMENT

Guide to Managing Vendors

EDITOR'S NOTE: It's time to take control. We tell you how to manage the supplier relationship, set up a vendor management office and negotiate deals. Plus, we offer tips for screening those sales calls!

SPECIAL REPORT

PACKAGE BEGINS ON PAGE 35.

TELLABS CIO JEAN HOLLEY

36 Getting to Know You. To establish a healthy partnership with a technology vendor, you need to ask lots of questions, ensure that you're getting honest answers and provide a high level of candor in return.

THE VENDOR MANAGEMENT OFFICE

38 How to Create It. Vendor management offices can be effective for centralizing procurement, monitoring relationships and cutting costs. Here's how three companies are learning to get the most out of their vendors.

AFLAC CIO JIM LESTER

Also: How to Staff It. It takes thorough knowledge of hardware, software and systems, plus an awareness of business unit needs, to negotiate and manage long-term vendor relationships.

40 Q&A: Tough Tactics. Expert Joe Auer offers tips for hardball negotiating with technology vendors.

42 Cold-Call Cascade. Here are some of the new sales tactics vendors are using to weasel their way in — and some of the crafty ways IT managers are screening them out.

43 Opinion: Managing IT vendors isn't something that stops at the corporate data center or even inside IT itself, says columnist Mark Hall.

WWW.COMPUTERWORLD.COM

BART PERKINS

Tips From the Experts. From how to prepare to how to perform at the bargaining table, negotiation experts, including *Computerworld* columnist Bart Perkins, offer their most effective tips for driving a hard bargain with technology vendors.
QuickLink 52013

Tips From Your Peers. Want to know how other IT managers deal with the relentless vendor calls and e-mails? Check out this online collection of advice.
QuickLink 52418

AT DEADLINE

AOL Stalls New Netscape Release

America Online Inc. has delayed the release of the first public test version of its new Netscape Web browser until the end of the month to fix some bugs. The beta version of Netscape 8 was scheduled for release last week. The browser, aimed at Microsoft Corp.'s Internet Explorer, is designed to defend against phishing scams and malicious code.

ChoicePoint to Warn on ID Thefts

ChoicePoint Inc., a provider of credit and personal information, reached an agreement with 19 states to contact 145,000 consumers whose personal information – including names, Social Security numbers and credit reports – may have been stolen by identity thieves. ChoicePoint is working with law enforcement agencies to investigate last fall's alleged data theft, in which about 750 people so far have been victimized.

The SEC Threatens SCO With Delisting

Unix vendor The SCO Group Inc. disclosed that it has been notified that it could soon be delisted by Nasdaq because the company hasn't yet filed its Form 10-K annual report for fiscal 2004. Under Securities and Exchange Commission rules, the form was due late last month. A SCO spokesman said the company has until Feb. 25 to file and avoid delisting.

Sun Starts Selling Fujitsu Servers

Sun Microsystems Inc. has begun selling Fujitsu Ltd.'s PrimePower line of Unix servers, a first step in a plan to unify the companies' Sparc-based product lines by 2006. Sun and Fujitsu said they will jointly develop a line of Sparc systems, called the Advanced Product Line, to replace their Sun Fire and PrimePower machines.

Handheld Risks Prompt Push for Usage Policies

Devices seen as 'next frontier' for IT security threats

BY JAIKUMAR VIJAYAN
SAN FRANCISCO

THE INCREASING security risk posed by handheld devices is creating a need for formal policies governing their use in corporate settings, according to IT managers and analysts who attended the RSA Conference 2005 here last week.

They added that a failure to pay attention to the threat posed by handhelds, many of which are personally owned by end users, leaves companies vulnerable to data losses and privacy breaches.

"Companies need to bite the bullet and address this problem now," said David Melnick, a security consultant at Deloitte & Touche LLP in New York. Driving much of the concern is the proliferating use of handheld devices for accessing corporate e-mail, storing sensitive data and running applications such as sales force automation and inventory management tools, Melnick said.

In a report issued two weeks ago, IBM's Global Security Intelligence Services team described mobile devices such as smart phones as "the next frontier for viruses, spam and other potential security threats."

IBM's Global Business Security Index Report, which offers a quarterly analysis of worldwide IT security trends, cited a growing number of viruses that target handhelds, including a recent one called Cabir. "It is likely that such worms will be used by copycats and may spur an epidemic of viruses aimed at mobile devices," the IBM report said.

Chuck Gilpin, a St. Louis-based network architect at The Boeing Co., said that such concerns have prompted the aircraft maker to require handheld and mobile users to use a virtual private network (VPN) to gain access to its corporate network. Boeing also mandates that users encrypt all sensitive corporate data stored on their handhelds, he said.

But implementing such measures has been a challenge, Gilpin added. The relative lack of client software for enabling protected access from handheld devices has made it hard for users to log in via Boeing's VPN, he said.

Similarly, it's hard to apply a consistent approach to securing the devices because they're made by many different manufacturers and come with various operating systems, he said.

Handheld-related security issues need to be made part of broader security planning processes for wireless LANs, said Djino Blanchette, director of telecommunications and IT at Ogilvy Renault, a Montreal-based law firm.

For now, Ogilvy Renault hasn't implemented any security measures for handheld devices, Blanchette said. Instead, the firm is focusing on deploying an intrusion-detection system to secure wireless access for lawyers using laptops. "Ultimately, though, it is all going to be part of the same problem," he said.

A good place to begin securing handhelds is to understand how they get into the enterprise, what kind of information is stored on them and how they're used to access corporate networks, Melnick said. Eventually, companies will need plans that provide auditing, monitoring and policy enforcement capabilities, he added. "This is a new, unbudgeted area of responsibility for IT," Melnick said.

52709

Security Considerations

RISK IDENTIFICATION: Who uses handhelds within your company? Were the devices deployed as part of corporate rollouts or bought by end users?

RISK ANALYSIS: What kinds of information are stored on handhelds, and how much of it is proprietary?

USAGE MONITORING: What policies are needed to control the use of both personal devices and company-owned handhelds?

SOURCE: DELOITTE & TOUCHE LLP, NEW YORK

MORE NEWS ONLINE

Bill Gates says Microsoft is developing a more secure version of Internet Explorer:

QuickLink 52637
www.computerworld.com

Symantec Continues Effort to Sell Veritas Deal

SAN FRANCISCO

Symantec Corp. CEO John Thompson last week found himself again defending his company's planned acquisition of Veritas Software Corp. amid continued concerns about Symantec's strategy and Microsoft Corp.'s looming presence in the IT security market.

Addressing reporters during a roundtable discussion at the RSA Conference 2005 here, Thompson rebutted suggestions that the Veritas merger is a defensive move driven by Microsoft's growing ambitions in the security market. "I couldn't care less about what Microsoft does," he said. "We are convinced that we can whip Microsoft in the market."

Instead, he said, Symantec's purchase should be viewed as a strategic expansion of its technology offerings in response to a need among IT managers for integrated software supporting data integrity and availability.

Symantec and Veritas executives are being pressed to justify the merger agreement they announced in December. Last month, for example, Veritas CEO Gary Bloom acknowledged that it has been difficult to convince the storage management software vendor's users and investors that the deal will benefit them [QuickLink 52080].

THOMPSON says Symantec "can whip Microsoft in the market."

But several large Symantec users who took part in the panel voiced support for the Cupertino, Calif.-based company's strategy.

There is a growing need for sets of tools that can help users improve both the security and availability of stored data, said Tom Jones, director of security at California's Health and Human Services Agency.

Jones added that the agency faces a huge challenge in protecting the more than 300TB of data it stores. Much of the data is personal health information, and using point products to manage and secure it won't be good enough in the long term, he said.

ChevronTexaco Corp. has begun taking a more integrated view of the security risks its systems face, said Richard Jackson, the company's chief information protection officer. ChevronTexaco's IT infrastructure includes about 40,000 desktop PCs, 8,000 laptops and 750 servers worldwide, and it stores more than 500TB of data. "Decision quality is central, so integrity of data is crucial," Jackson said.

– Jaikumar Vijayan

Union Calls on San Antonio To Fix SAP-based System

Legacy data issues, other glitches lead to payroll snafus

BY MARC L. SONGINI

The head of San Antonio's police union has called on the city to fix or discard an SAP-based payroll system that has caused headaches for his membership since its installation five months ago.

The payroll application is part of the city's wide-ranging $89 million software installation dubbed the Enterprise Resource Management System and built around SAP AG's R/3 ERP and CRM software.

The city bought the system to replace a number of 30-year-old homegrown legacy systems, said Troy Elliott, director of the project for the city. Funding was approved in June 2001, and Deloitte Consulting LLP was retained as the integrator. The system rollout began in 2003.

Elliott said there were a number of technical and procedural issues that led to the payroll glitches — none of which had to do with the quality of SAP's software.

"Change is tough when you've had a system in place for 30 years," Elliott said. "We're still working through [the migration]."

Teddy Stewart, president of the San Antonio Police Officers Association, last week held a press conference at city hall to highlight a string of glitches that he said has prevented the force from receiving accurate paychecks and that led to incorrectly managed personnel information.

> **"Change is tough when you've had a system in place for 30 years. We're still working through [the migration].**
>
> **TROY ELLIOTT,** PROJECT DIRECTOR

"This SAP system has been a nightmare," Stewart said in an interview. "Since implementing it last year, it's been one headache after another. It's been terrible for morale."

By going public, Stewart said, he hopes to apply pressure on city officials to "do whatever it takes to fix it or go back to the old system."

"There have been issues around the accuracy in the payroll process, and there is a strong sentiment on the part of the council that those errors need to be corrected," said San Antonio City Councilman Julian Castro. While the system hasn't lived up to its promise, he said he hopes that the city and Deloitte "will learn from mistakes made in the first couple of phases and improve performance."

Bob Campbell, national managing director for the public sector at Deloitte & Touche USA, said that the issues with the rollout are much like those at similar projects, and that all have been "quickly and properly addressed" so far.

Worse Than Expected

The city had anticipated some difficulties because of the complexity of the police and fire department payrolls, but the result was worse than expected, according to Elliott.

The formatting of the data in the legacy applications in some instances helped cause glitches when placed in the SAP application, he said. Also, SAP requires enterprisewide compliance with its rules, and some departments were interpreting policies individually.

Nevertheless, Elliott said the city has been stabilizing the system and reducing the number of errors. He expects the payroll to be running mostly as expected by March.

"It's going to work as planned," said Elliott. "From a city standpoint, we'll do whatever we need to make it work." The city expects to go live with SAP CRM in July.

"We have an excellent relationship with the city of San Antonio and have been told as recently as [last week] they are satisfied with SAP's software," said William Wohl, a spokesman for SAP America Inc. in Newtown Square, Pa.

"This is another situation where a municipality has been duped into thinking these massive upgrades are easy, and lo and behold, they find out they're not," said Joshua Greenbaum, an analyst at Enterprise Applications Consulting in Berkeley, Calif. **52711**

IBM, Sun Look to Simplify IT Infrastructure

Vendors build tools to provide management links

BY LUCAS MEARIAN

IBM and Sun Microsystems Inc. are both building software to provide systems administrators with a single, consistent view of their IT infrastructures, from business applications and related servers, through the network and down to the storage arrays.

Users and analysts said they expect such systems to provide managers with far more control over IT operations and need fewer administrators.

Tim Docherty, director of IBM's BladeCenter server division, said IBM is working to port its SAN Volume Controller (SVC) and SAN File Manager software to its BladeCenter server systems in order to uncouple applications from physical servers and storage. The project is expected to be completed by year's end.

Ken Westerback, information technology architect at St. Michael's Hospital in Toronto, said he likes the idea of fewer management points but does not care whether virtualization is on his BladeCenter or on an appliance in front of all his storage.

"As far as a single point of management for servers and storage, we're not doing it," he said. However, "I certainly believe the fewer management points, the better."

St. Michael's uses IBM's SVC product to pool storage capacity from two IBM midrange FAStT arrays and a high-end Enterprise Storage Server. Westerback also purchased three IBM BladeCenter products over the past 18 months and is looking to add a second BladeCenter rack.

Docherty said IBM started the integration project with BladeCenter because 50% of those systems are used in storage-area networks and because it can use both network LAN and Fibre Channel switches.

Chris Woods, chief technology officer for Sun's storage practice, said that by midyear, customers should have access to new Sun software that marries the Container tool in the Solaris 10 operating system with the StorEdge Enterprise Storage Manager software it licensed from Burlington, Mass.-based AppIQ Inc.

The Solaris Container tool creates virtual zones, thereby isolating business applications and their supporting servers. Enterprise Storage Manager creates an abstraction layer between servers and their supporting storage infrastructure, Woods said.

David Freund, an analyst at Illuminata Inc. in Nashua, N.H., said the IBM and Sun efforts are part of a trend among system vendors to bring mainframelike features to distributed environments.

"With that big box, you had complete control over the infrastructure," Freund said. "You can see all the resources and manage them and charge for them. I think senior IT people want their big box back."

James Dobson, a systems architect at Dartmouth College in Hanover, N.H., uses Solaris-based Sun servers and storage arrays. He's interested in combining the management of his server, network and storage infrastructure, but he's also wary about problems that such integration software could cause. Dobson said he would need the ability to debug and troubleshoot such software.

"Provided that we can get a good idea of what was done, I would find the tighter integration of storage, network, servers and services to be a useful direction," Dobson said.

IBM's Docherty said he expects the adoption curve of combined virtual server/storage applications will be slow because "the reality is, customers don't turn on a dime overnight." **52702**

Vendor Efforts To Link Server, Network, Storage

IBM

- Port SAN Volume Manager to BladeCenter
- Port SAN File Manager to BladeCenter
- Provide the same look and feel to storage and server management software
- Ship product by end of 2005

SUN

- Combine Solaris Container with StorEdge Enterprise Storage Manager
- Offer customized management portal for servers and storage
- New software supports Common Information Model standard
- Ship product by midyear

BRIEFS

M&A Expert Named To New CA Post

Computer Associates International Inc. named Michael Christenson to a new post, executive vice president for strategy and business development. Christenson, 46, retired last year from Citigroup Global Markets Holdings Inc. after a 20-year investment banking career. He reports to Chief Operating Officer Jeff Clarke and will lead corporate planning and strategy as well as merger and acquisition activities.

Alliance Extends Security Specs

The Liberty Alliance has released a draft version of ID-WSF 2.0, its set of specifications for identity verification for Web services. The specifications have been extended to support SAML 2.0, which should make it easier for developers adopting SAML to implement Identity Web Services Framework specifications for managing identity-based Web services, alliance officials said.

HP Q1 Results Beat Wall Street Forecast

Hewlett-Packard Co. reported flat first-quarter earnings and a 10% increase in revenue, surpassing Wall Street expectations.

HP BY THE NUMBERS

	REVENUE	PROFIT
Q1 '05	$21.5B	$943M
Q1 '04	$19.5B	$936M

NetScout Buys Quantiva for $9M

NetScout Systems Inc., a developer of enterprisewide network and application performance management products, said it has agreed to buy the business and assets of privately held Quantiva Inc. for $9 million in cash. Quantiva is a maker of automated analytics systems for application performance management. The deal is expected to close by the end of June.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY GOSSIP BY MARK HALL

MATTHEW FAULKNER

Investigators Try To Track Down . . .

. . . eBay miscreants who peddle unauthorized IT gear. "It's cat-and-mouse PI work to catch them, but we do get them," boasts Joe Loomis, president of Net Enforcers Inc. in Coral Springs, Fla. His company is hired by firms trying to protect their brands and their authorized resellers and distributors by cracking down on sales outside official channels. San Jose-based eBay Inc.'s Web site is the Mecca for gray-market sellers — and a magnet for many corporate IT buyers looking for good deals.

SHORE promises integration.

"There's more gray-market activity on eBay than legitimate," Loomis claims. Alec Campbell, director of business development at BuySafe Inc. in Alexandria, Va., concurs. "It's the biggest area of fraud recognized online," he says. BuySafe offers sellers of legitimate goods a policy that insures buyers for up to $25,000 on anything they purchase via the popular auction site. "We've done due diligence on the back end to ensure that the merchants are legitimate and trustworthy," Campbell says. The gray market for computers has existed for decades, but eBay makes it easier to sell the gear from unauthorized sources at prices not approved by the manufacturer. EBay didn't return calls for comment.

CA sticks its toe in the waters . . .

. . . of integrated IT management. Talk about counterintuitive. While rivals such as IBM and Compuware Corp. bought companies to help them deliver IT management dashboards, Computer Associates International Inc. — known for buying just about any company with bits on a disc — settled for a partnership and not a marriage. According to Shari Shore, a vice president of product marketing at CA, a deal announced last month with Niku Corp. in Redwood City, Calif., will provide "out-of-the-box integration" between Niku's Clarity 7.5 software and CA's Service Desk, Configuration Manager and Business Process Manager tools. Expect to open such a box sometime in Q2. Until then, CA and Niku offer customized hooks from CA's IT management apps to Clarity, a tool used to translate IT operational activity into financial metrics that chief financial officers and CEOs can comprehend. In a report about the deal, Forrester Research Inc. analysts called CA's move "positive" but observed that "CA crawls where it should be jogging."

1M People trained by New Horizons in 2004

IT certification training takes a cue from. . .

. . . the digital entertainment industry. IT managers have been complaining to certification authorities that "book learning isn't enough," says Martin Bean, chief operating officer at New Horizons Computer Learning Centers Inc. in Anaheim, Calif. New Horizons, which has 255 training centers in 55 countries, conducts certification training and testing for companies such as Microsoft Corp. and Cisco Systems Inc. (The actual certifications, such as Cisco Certified Internet Expert or Microsoft Certified Engineer, are bestowed by the vendors.) Bean says IT execs want less book smarts and more hands-on expertise. To get it, he says, "the learning industry can take from the gaming industry." What's needed are realistic simulation tests, he argues, noting that his company is adding such capabilities to its curriculum. "We need better scenarios that are fun," Bean says. At least just as much fun as troubleshooting servers and routers in your data center.

BEAN: Train and entertain.

Print management goes the ASP . . .

. . . route with a new hosted service. This week, L2 Solutions Inc. in Palo Alto, Calif., will begin offering its Fuse print management software on an application service provider basis. ASP pricing starts at $500 per month. Wrich Printz, L2's CEO, claims that large organizations can reduce costs by up to 25% by managing printing needs through Fuse. The software lets you set print policies and designate approved print shops for different types of jobs. It also lets you control who can send work to a specific printer and ensure that print jobs have the proper approvals. In addition, Fuse can group similar jobs together to lower costs. In the future, Fuse will let you initiate and manage bids from printing businesses, Printz says.

PRINTZ: Print via ASP.

Today, it's spyware, tomorrow . . .

. . . it will be something else. There's always some new security problem that IT faces, and the next "something else" is likely to be Bluetooth. So says Dennis Szerszen, vice president of business development at SecureWave SA in Luxembourg. "Bluetooth will be the next threat vector for how malware will come into your system," Szerszen predicts. If you're still using blacklists to help protect your users, you're wasting your time. "Blacklists are futile," he argues. According to Szerszen, the most effective anti-malware weapon is a whitelist of applications that you permit to run on a machine. What end users can't execute won't hurt your company, he says. **52669**

MORE SECURE PC'S ONLY FROM HP. HERE'S WHY.

Only HP offers ProtectTools. They provide an array of the latest security tools designed to make your new HP notebook, tablet and handhelds virtually impervious to hackers. A single security console allows you to see an integrated view of your security modules for ease of use and maintenance.

Here are just a few of our tools:

- HP Credential Manager has multiple levels of user identification for added security and single-sign-on capabilities for more ease
- Hardware protection via industry-leading embedded security chip
- Smart Card Security, either integrated or via a PC card
- BIOS configuration for secure setup and maintenance

Contact HP to find out which are available for your PC's.

Hewlett Packard Development Company, L.P

THE WORLD'S WIDEST ARRAY
OF WIRELESS PC'S.

CALL	**1-877-298-0631**
CLICK	**hp.com/go/BRCmag3**
VISIT	**your local HP reseller**

hp invent

More wireless PCs. More security.

Security and wireless. Together at last. HP's wireless[1] notebooks, powered by Intel® Centrino™ Mobile Technology, have security features built in, not bolted on. In fact, all of our new wireless[1] notebooks, tablets and handhelds have distinct security advantages that set us apart. HP ProtectTools provides an array of the latest security tools designed to make your HP notebook, tablet and handhelds virtually impervious to intruders, whether you're working with wires or without. More expertise, technology, service, support and security. That's what HP Smart Office solutions give you.

HP recommends Microsoft® Windows® XP Professional.

HP COMPAQ nc6120 NOTEBOOK

$1,249

($1,599-$350 Instant Savings=$1,249)[4]

- Intel® Centrino™ Mobile Technology
  - Intel® Pentium® M Processor 730 (1.60GHz)[3]
  - Intel® PRO Wireless 2200BG (802.11b/g)[1]
- Microsoft® Windows® XP Professional
- 15" XGA Display
- 24X DVD/CD-RW Combo Drive[6]
- 512MB DDR SDRAM (1 DIMM)
- 40GB (5400 rpm) Hard Drive[5]
- ProtectTools: Security Manager, Credential Manager, BIOS Configuration

HP COMPAQ tc1100 TABLET PC

$1,599

($2,049-$450 Instant Savings=$1,599)[4]

- Intel® Centrino™ Mobile Technology
  - Intel® Pentium® M Processor ULV 713 (1.10GHz)[3]
  - Intel® PRO Wireless 2200BG (802.11b/g)[1]
- Microsoft® Windows® XP Tablet PC Edition
- 256MB DDR SDRAM
- 40GB (4200 rpm) Hard Drive[5]
- 1-year limited warranty[2]
- ProtectTools: Security Manager, Optional Smart Card Security, Credential Manager

Enhance your system.

HP iPAQ™ hx2750 POCKET PC

- Intel® PXA270 Processor (624MHz)[3]
- Windows® Mobile 2003 for Pocket PC, Second Edition
- 128MB SDRAM, 128MB Flash ROM
- ProtectTools: Biometrics, Data Encryption

$549

MORE ADVICE | MORE TECHNOLOGY | MORE SUPPORT

Secure your HP notebook investment. Get Accidental Damage Protection for as little as $99/year or $169/3 years.

CLICK	**www.hp.com/go/mobility6**
CALL	**1-866-625-4734**
VISIT	**your local reseller**

invent

MOBILE TECHNOLOGY

Prices shown are HP Direct prices; reseller and retail prices may vary. Prices shown are subject to change and do not include applicable state and local taxes or shipping to recipient's address. Offers cannot be combined with any other offer or discount, are good while supplies last and are available from HP Direct and participating HP resellers. All featured offers available in U.S. only. 1. A standard WLAN infrastructure, other Bluetooth-enabled devices and a service contract with a wireless airtime provider may be required for applicable wireless communication. Wireless Internet use requires a separately purchased service contract. Check with service provider for availability and coverage in your area. Not all Web content available. 2. One-year limited warranty for parts, labor and next-business-day support. 3. Intel's numbering is not a measurement of higher performance. 4. Instant savings offer available on qualifying HP Compaq nc6120 Notebooks and HP Compaq tc1100 Tablet PCs through 5/31/05. 5. For hard drives, GB=billion bytes. 6. 24X DVD/CR-RW Combo Drive data transfer rates may vary as follows: for recording to CD-R media, for writing to CD-RW media, for reading CD media, the max transfer rate may be up to 3600 Kbps; for reading DVD media, the max transfer rate may be up to 10,800 Kbps. Actual transfer rates may vary depending on media quality. Intel, Intel Logo, Intel Inside, Intel Inside Logo, Intel Centrino, Intel Centrino Logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. ©2005 Hewlett-Packard Development Company, L.P.

Fed Agencies Get a D+ In Computer Security

But CISOs claim that the grading process is flawed

BY JAIKUMAR VIJAYAN

THE OVERALL security of federal government computer systems garnered only a D+ average in the 2004 security report card released last week by the House Government Reform Committee. A year earlier, the average grade was a D.

At the same time, a survey of 30 federal chief information security officers (CISO) found a need for "significant" improvements in the reform committee's evaluation criteria.

Seven of the 24 agencies graded, including the departments of Homeland Security, Energy, and Health and Human Services, scored an F for the second consecutive year.

Rep. Tom Davis (R-Va.), chairman of the Government Reform Committee, said at a press conference that government agencies are generally "moving in the right direction" on security. But the 2004 grades also contain significant bad news, Davis added. "We need to move faster, and I hope it won't take some kind of cyber [attack] to crystallize everybody," he said.

Among the agencies showing the most progress last year were the Department of Transportation, which improved to an A- from a D+ in 2003; the Department of Justice, which received a B- after failing a year earlier; and the Department of the Interior, which was given a C+ after getting an F in 2003.

The annual Federal Computer Security Report Card is based on evaluations as defined in the Federal Information Security Management Act (FISMA) of 2002. The evaluations are compiled by the committee based on information provided by each agency's inspector general.

The key value of the report card is in learning what actually works to improve security, said Alan Paller, research director at SANS Institute, a Bethesda, Md.-based training company. "A large number of grades went down, a few went up — a lot. What allowed those who increased to do so?" he asked.

New Tools Help

George Bonina, director of IT security at the Environmental Protection Agency, said that much of his agency's improved showing stemmed from the organization's use of automated tools for compliance verification and monitoring.

In a comment relayed via a department spokeswoman, Vance Hitch, CIO at the Justice Department, said that "organizational enhancements and development of new tools and skills" led to the dramatic improvement shown by the agency in 2004.

The survey of CISOs, conducted by Ashburn, Va.-based Telos Corp., gave a C grade to the Federal Computer Security Report Card itself.

According to 60% of the CISOs surveyed, the report card provides useful insight into their security preparedness. But the same amount questioned the report card's real impact, noting that agency funding for IT security was not affected by bad grades.

"What is the purpose of evaluating and grading if there is no incentive for good performance and no repercussions for poor performance?" said Richard Tracy, chief security officer at Telos.

The Telos report was based on telephone surveys of CISOs from one-fourth of all federal agencies, according to the company.

In response to the survey results and the concerns expressed in the Telos report, Davis last week announced the creation of the CISO Exchange, a public-private initiative focused on giving federal CISOs more of a voice in upgrading federal cybersecurity.
52707

Federal Computer Security Report Card

SELECTED AGENCIES	'04	'03
Department of Transportation	A-	D+
Nuclear Regulatory Commission	B+	A
Environmental Protection Agency	B	C
Department of Justice	B-	F
Department of the Interior	C+	F
Department of State	D+	F
Department of the Treasury*	D+	D
Department of Defense*	D	D
NASA	D-	D-
Department of Commerce	F	C-
Department of Energy	F	F
Department of Homeland Security	F	F

SOURCE: HOUSE GOVERNMENT REFORM COMMITTEE

*No independent evaluation from the agency's inspector general was submitted in 2003.

Pharmaceutical, Health Care Firms Launch RFID Projects

BY HEATHER HAVENSTEIN
DALLAS

Radio frequency identification technology is generating interest from pharmaceutical companies as a way to deter illegal drug trafficking and from health care executives who are trying to keep tabs on medical equipment.

Late last year, Stamford Conn.-based Purdue Pharma LP announced plans to become one of the first pharmaceutical companies to integrate RFID into packaging at the manufacturing level to prevent counterfeiting. And last week at the Healthcare Information and Management Systems Society's conference here, Purdue and Symbol Technologies Inc. said they plan to use Symbol's RFID mobile computers to further that effort.

"We have to identify counterfeit drugs before they penetrate our supply chain, and identify vulnerabilities in our supply chain," said Aaron Graham, vice president and chief security officer at Purdue. "While there may not be an ROI in dollars, how do you put a price on patient safety?"

The Symbol MC9000-G computers, which combine RFID and bar-code reading with imaging and wireless connectivity, will be provided without charge to state and federal law enforcement agencies for use in efforts to stop illegal drug trafficking, Graham said.

"How do you put a price on patient safety?" asks AARON GRAHAM.

The Food and Drug Administration has recommended RFID as the best way to thwart illegal drug trafficking, and several states, including Florida and California, have passed laws requiring pharmaceutical companies to track drug shipments as they move through the supply chain.

Purdue has already added RFID tags to bottles of two of its pain relief drugs, Graham said. RFID readers capture tag information at stations along the manufacturing line.

By the end of the year, Pfizer Inc. will be adding RFID tags to bottles of Viagra, and it plans to use the technology to prevent thefts of other products, said Bryant Haskins, a spokesman for the company.

Most pharmaceutical makers have started pilots using RFID to deter counterfeiting, said Bob Goodman, an analyst at The Yankee Group in Boston. But many are struggling with the cost of RFID tags — about 30 cents per bottle, compared with one cent per bottle for bar codes, he said.

Meanwhile, some hospitals are beginning to use RFID to help staff locate pieces of medical equipment more quickly. Glen Allen, Va.-based Agility Healthcare Solutions last week announced that Presbyterian Healthcare Services in Albuquerque will use its RFID-enabled equipment management system to track 6,000 pieces of mobile medical equipment at Presbyterian Hospital.

The hospital projects a 200% ROI over five years by reducing equipment rental costs and labor, said Jason Fahrlander, Presbyterian's materials management administrator.

Two months ago, Beth Israel Deaconess Medical Center in Boston started to track emergency-room equipment using RFID tags and asset management technology from PanGo Networks Inc. in Framingham, Mass. The technology has boosted efficiency in locating devices, said John Halamka, CIO at CareGroup Inc., Beth Israel's parent company.
52704

MORE THIS ISSUE

CareGroup's John Halamka lets RFID get under his skin – literally. **Page 19**

INTEL RUNS SAP.

©2005 SAP AG. SAP and the SAP logo are trademarks and registered trademarks of SAP AG in Germany and several other countries.
Intel and Itanium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

AND HERE'S WHY: Intel rolled out SAP's supply chain management solution company-wide to help them respond quickly to market changes, obtain raw materials and produce more products. The combination of Intel® Itanium® 2 processor–based servers and SAP® software delivered enhanced performance, lower cost of ownership and the flexibility to adapt. Visit sap.com/intel or call 800 880 1727 for more information.

BRIEFS

HP Details Fiorina Severance Package

Two days after the ouster of Carly Fiorina, Hewlett-Packard Co. detailed the severance package for its former chairman and CEO in a regulatory filing. Fiorina will get a cash payout of $21.4 million, $50,000 for financial counseling, and legal and outplacement services. She will keep her PC equipment and technical support for three months. HP will also maintain Fiorina's home security system for a year.

Oracle User Groups Plan Joint Meeting

The Oracle Applications User Group and the Quest International Users Group, an independent association of PeopleSoft and J.D. Edwards users, will hold a joint conference this spring.

The event, slated for June 13-16 in Grapevine, Texas, is part of an effort to boost the identity of both user groups within the Oracle community.

BEA Systems Buys Swedish Vendor

BEA Systems Inc. has acquired Sweden-based Incomit Software, a privately held maker of infrastructure software for the telecommunications industry. Terms of the agreement weren't disclosed. BEA's fifth acquisition in two years is designed to enhance the company's place in the telecommunications industry by augmenting the BEA WebLogic Service Delivery Platform.

HP Brings Out Opteron Blades

Advanced Micro Devices Inc.'s Opteron processor got a vote of confidence when HP unveiled its first blade servers based on the 64-bit processor. The two systems are the first Opteron blades brought out by a major vendor. The ProLiant systems are priced from $2,900 and $3,400 and will ship next month.

Users Hope Telecom Mergers Provide Stability, Simplicity

Verizon, MCI make latest deal; network managers worry about transition issues

BY MATT HAMBLEN

NETWORK MANAGERS somewhat warily welcomed Verizon Communications Inc.'s agreement last week to buy MCI Inc., the third major merger announced in the telecommunications industry in recent weeks.

"I think consolidation is good, and it will create stability in the telecom environment," said Paul Lowenwirth, vice president of telecommunications at Viewpointe Archive Services LLC's operations facility in Houston. "If the merger transitions go right, customers will receive good service."

FRED GRATKE of Burlington Northern says having combined carriers to negotiate with for new contracts will "simplify life."

But that's a big "if" for many businesses, according to Lowenwirth and several of the 11 other network managers interviewed by *Computerworld* last week. They voiced concerns similar to the ones raised earlier this month after SBC Communications Inc. announced that it had agreed to buy AT&T Corp. [QuickLink 52377].

"Absolutely, we're worried about changes to our carrier account teams and quality of network service slipping in the transitional period," said Lowenwirth.

"Verizon is sort of a gunslinger taking the hill from the MCI world, and there will be plenty of cultural issues between the two," he added.

Meanwhile, Qwest Communications International Inc. late last week said it plans to renew its bid for MCI, indicating that this takeover saga may not be over. An earlier Qwest bid of $23 a share was rejected in favor of the Verizon offer.

Until any mergers are approved, IT managers may see "a 12- to 18-month shutdown period" on information about new service offerings, said Walt Magnussen, telecommunications director at Texas A&M University in College Station.

"It's hard to figure out what your own network strategy will be if you can't get reasonable expectations from the carriers," Magnussen said.

But Fred Gratke, assistant vice president of telecommunications at The Burlington Northern and Santa Fe Railway Co. in Forth Worth, Texas, said it will "simplify life" to have the carriers combined, especially when he negotiates new contracts.

> **"It's hard to figure out what your own network strategy will be if you can't get reasonable expectations from the carriers."**
>
> WALT MAGNUSSEN, TELECOMMUNICATIONS DIRECTOR, TEXAS A&M UNIVERSITY

Service to Improve?

"Enterprises will be better served in the long run," agreed Bob Pojman, senior vice president of technology and network services at Bisys Information Solutions.

The Houston-based unit of The Bisys Group Inc. provides hosted financial applications to more than 250 banks and has network services contracts worth a total of about $25 million annually with five carriers.

Combining carriers will mean fewer handoffs between different networks, reducing complexity and providing users with "more-ubiquitous pricing," Pojman said.

He added that over the past two years, Bisys has built automated systems for reporting network problems and initiating new services. Pojman said that should protect it against merger-related workforce reductions by the carriers. **52684**

TELECOM ALTERNATIVES

Some network managers at midsize companies said switching to smaller carriers was the right option for them:

QuickLink 52698
www.computerworld.com

NEW PRODUCT

HP Returns to Routers, Aims at Branch Offices

ProCurve Secure Router 7000dl series
Hewlett-Packard Co.

■ **PRODUCT SUMMARY:** HP's ProCurve networking unit today will expand beyond the switch and wireless LAN access point markets by adding a pair of branch-office routers. The 7102dl has two slots for WAN interface cards and supports up to four T1 connections. The 7203dl has two standard slots and one wide slot for WAN cards and can handle up to 12 T1 connections. The routers each have a compact flash port to allow easy installation of configuration and image files from flash memory, HP said. It added that both machines come with lifetime warranties.

■ **USER EXPERIENCE:** Elk Grove Unified School District in Sacramento, Calif., is testing the 7203dl and has ordered four that will be used in elementary schools for WAN connections, said Dan Clinton, network administrator for the 60,000-student district. In all, the district may order 40 of the routers, one for each of its elementary schools, which are connected to the school system's metropolitan-area network via T1 lines. The HP gear will replace routers from Nortel Networks Ltd., Clinton said, adding that Nortel's current products are too expensive. The school district also evaluated routers from Cisco Systems Inc. but found them too pricey as well. "Plus, you get a lifetime warranty from HP, and the warranties from Cisco are killing us," costing up to 20% of a device's purchase price annually, Clinton said. Elk Grove has used HP's switches and other products in the LAN that supports its central administration for four years.

Clinton praised the company's technology and customer service, but he said he hopes that the ProCurve division will get a development boost following this month's ouster of Carly Fiorina as HP's CEO. "I see it as a positive move that she's gone," he said.

■ **ANALYST ASSESSMENT:** The announcement of the 7000dl series signals HP's re-entry into the router market, which it exited in the late 1990s, said Nick Lippis, an analyst at Lippis Consulting in Hingham, Mass.

Lippis said that the new routers are priced at about half the list price of comparable devices from Cisco and that HP's lifetime warranty will be "huge" in terms of attracting customer attention.

■ **OTHER VENDORS IN THIS MARKET:** Cisco, Nortel and numerous smaller companies

■ **PRICE:** The 7203dl has a list price of $7,985. HP didn't disclose the cost of the 7102dl.

■ **AVAILABILITY:** The routers are due to ship in April. **52697**

– Matt Hamblen

Microsoft

HOW DID ONE COMPANY REDUCE ITS TCO? THEY SWITCHED FROM LINUX TO WINDOWS.

"When we calculated the total cost of ownership for Red Hat Linux using a 10-year Net Present Value Model, we were surprised at how much higher it was than for Windows®."

—J.E. Henry, CIO,
Regal Entertainment Group

Regal Entertainment Group, the largest movie theater operator in the U.S., ran its POS concession and ticket terminals on Red Hat Linux. However, they saw that it lacked the vendor support and remote management tools they needed to support their strategic plans. After an in-depth comparison, Regal found that Windows Embedded would deliver a lower TCO, improved security, and fewer risks. "With Windows, we get an integrated, easily managed platform that can extend from the data center to our POS devices," says Cliff DeYoung, CTO at Regal.

To get the full case study, other case studies, or third-party findings, go to **microsoft.com/getthefacts**

© 2005 Microsoft Corporation. All rights reserved. Microsoft, Windows, the Windows logo, and Windows Server System are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Microsoft®
Windows
Server System

GLOBAL DISPATCHES An International IT News Digest

Senior Legislator Urges Privacy Rights in Japan

TOKYO

AN INFLUENTIAL Japanese politician earlier this month called for the right to information privacy to be added to the country's constitution. The collection, storage, use and transfer of personal information should be banned unless the person consents to the activity or there's a valid legal exception, said Yukio Hatoyama, a member of Japan's House of Representatives and former leader of the Liberal Democratic Party of Japan.

People should have the right to know what information about them has been gathered and how it's being used, Hatoyama said in a speech about updating Japan's 1947 constitution.

Japanese citizens tend to be less concerned about personal data collection than citizens in Western countries. For example, many Japanese citizens voluntarily provide details about their households to the local *koban*, or neighborhood police office. But concerns about privacy are starting to emerge because of a recent run of highly publicized information leaks at major Japanese companies, some of which exposed data about millions of people.

■ MARTYN WILLIAMS, IDG NEWS SERVICE

GLOBAL FACT

12,575

Number of Internet cafes shut down by authorities in China last year.

SOURCE: XINHUA NEWS AGENCY

EU Regulators Agree To Help VoIP Flourish

BRUSSELS

TELECOMMUNICATIONS authorities in 25 European Union countries have agreed to eliminate regulations that hamper adoption of voice-over-IP services in Europe and make it hard for VoIP providers to compete against traditional phone companies.

In a statement issued Feb. 11, the European Regulators Group said pro-competition policies that let VoIP flourish should be applied consistently across the 25 EU member nations. The issues that the regulators plan to address include number allocation. For example, in Germany, VoIP service providers are given telephone numbers starting with the 032 prefix, regardless of where the service is based, but customers often prefer local numbers.

The statement says that "numbering plans should be technologically neutral" and that the same ranges of telephone numbers should be made available for both traditional voice and VoIP services.

■ SIMON TAYLOR, IDG NEWS SERVICE

T-Mobile Phone Aimed At Corporate Buyers

CANNES, FRANCE

T-MOBILE INTERNATIONAL AG last week announced a smart phone that is based on the Windows Mobile operating system and includes cellular and Wi-Fi capabilities for corporate users. Bonn, Germany-based T-Mobile made the announcement at the 3GSM World Congress here.

The MDA IV model, due to be available in the second half of this year, offers wireless Internet connectivity via three technologies so it can be used in Europe, Asia and North America. The smart phone has business-oriented features, such as a keyboard for typing e-mail, a full Microsoft Office software suite and interfaces for synchronizing data with a PC. The screen can be turned around so the device becomes a minilaptop, T-Mobile said. **52670**

■ JOHN BLAU, IDG NEWS SERVICE

Compiled by Mitch Betts.

Briefly Noted

Mphasis BFL Ltd., an IT and business process outsourcing company in Bangalore, India, last week agreed to acquire Princeton Consulting Ltd., a Slough, England-based provider of CRM systems and services, for £7.73 million ($14.5 million U.S.).

■ JOHN RIBEIRO, IDG NEWS SERVICE

IBM announced last week that it plans to open more than a dozen so-called Innovation Centers in China, Brazil and Russia over the next three months to promote the use of Linux with IBM's middleware and hardware. The facilities will provide seminars and technical assistance to help local software developers and integrators build and deploy Linux-based systems, IBM said.

BT Group PLC in London has selected Arbor Networks Inc. to protect its entire corporate network in the U.K. from worms and cyberthreats, the Lexington, Mass.-based security company announced last week.

Dell Stands by Intel on CPUs, Exec Says

BY CRAIG STEDMAN

Jeff Clarke *is responsible for the development and marketing of Dell Inc.'s enterprise products, including its servers, workstations, storage devices and networking equipment. Clarke, one of three senior vice presidents who manage the different segments of Dell's product group, spoke with* Computerworld *last week about issues such as the company's continuing reliance on Intel Corp.'s chips over Advanced Micro Devices Inc.'s Opteron processor.*

How much of Dell's revenue comes from the enterprise products, and where do you expect that to go in the future? Enterprise is slightly north of 20% of our revenue. We're going to continue to grow it ahead of the company's average growth, but we don't project it out at any point in time.

What's your response to the view that Dell isn't a big technology innovator? Everybody's entitled to their opinion. Our view of the world is, "Look at these technologies. How can we bundle them together?" We were one of the first companies to put lithium-ion batteries in a system. Did we invent lithium-ion technology? No. Did we think of packaging it in a system? Yes. That's our approach to innovation, and our customers continue to vote with their wallets.

Why are you still holding off on using Opteron chips in servers? Our product plans are Intel-based, and that's what we're shipping today. We're always evaluating new technologies in our labs, and there are points in time where one part is faster than another one. The question is whether that advantage is going to be sustained over time.

What about Intel's Itanium chip vs. its 32-bit x86 processors with 64-bit capabilities? We're very, very strong proponents of the 32-bit chips with 64-bit extensions. We do have an Itanium-based system, because customers have asked for one. But the vast majority of our products are based on the 32-bit chips, and they will continue to be used in the vast majority of our products.

We reported last month that server shipments were being delayed by shortages of some disk drives, but Dell said it wasn't being affected by the shortages [QuickLink 52223]. Is that still the case? We're not seeing any shortages. We know how to run our business. We have a great understanding of supply and demand, perhaps in advance of our suppliers.

Have you been able to hold the line on pricing, despite the short supply? We did not raise prices, if that was your question.

Does Linux account for a big portion of your overall server shipments? It's significant. Linux is on about 15% of the servers that ship from our factory, and it has about a 23% or 24% share [on our machines] worldwide, if you count operating systems that are installed by customers.

What about Linux on the desktop? We factory-install it on all of our workstations. At the PC level, we don't see a strong demand for it.

What are you doing to try to take advantage of HP's ouster of Carly Fiorina as its CEO? We're focusing on our customers and trying to drive the best value to them. Our strategy remains very consistent.

How do you see HP now? They're a strong competitor.

Less strong than they were before? Sorry. You're not going to get the kind of answer you want from me on that. **52665**

READ MORE ONLINE

Go to our Web site for an extended version of this interview:

QuickLink 52664
www.computerworld.com

EMC²
where information lives®

Fr: chained to your desk

To: free to take that vacation

EMC® CLARiiON® CHANGES THE WAY YOU THINK ABOUT STORAGE. Your information and applications will be there when you get back. But some of the hassles of managing them will be gone forever. The CLARiiON CX series makes your online information safer and gives you simple, powerful management software. Network flexibility for SAN or NAS. Scalable solutions starting below $5,999. To learn more, visit www.EMC.com/backup. Or call 1-866-464-7381.

EMC² VELOCITY² PARTNER PROGRAM

Find an authorized EMC Velocity² Partner at www.EMC.com/velocity.

Continued from page 1

E-health

various federal agencies to analyze 500 industry responses to a request for information (RFI) on ideas for bolstering the use of EHRs. Brailer's office will release a set of guidelines for using EHRs and for building interoperability in the coming months, he added.

The RFI responses suggested that the government take a regional approach to fostering the use of EHRs and share in the cost of the technology, Brailer said. In addition, interoperability among various health care providers was a major theme of the responses.

"If interoperability is not . . . built into EHRs, a generation of investment will be lost," Brailer said. Organizations purchasing EHR technology today are buying proprietary software that isn't interoperable with products from other vendors, he added.

Seeking a Standard

A director of IT applications at a large U.S.-based health system who asked not to be identified said the government needs to step up and provide a nationwide standard.

"The government needs to take the lead, [and] the vendors will follow," he said. "This should be an agreed-upon data set of what we will be sharing with each other."

Many organizations today are limited to interoperating only with health care providers that use the same EHR vendor.

The Cleveland Clinic Foundation plans to house all of the patient records for its 12 hospitals in three regional central electronic repositories that doctors can access, said Albert Edwards Jr., director of the Office of Clinical Integration and Interfaces at the Cleveland Clinic.

Because the health care provider uses clinical care software developed by Epic Systems Corp. in Madison, Wis., Davis said, "it's not a strong leap to then hit another hospital that is using Epic and tap into their [EHRs], and now I can expand out to other regional hospitals."

At the HIMSS conference, Brailer noted that only the largest physician practices and hospitals are adopting EHR technology. Although more than half of group practices with more than 50 physicians have deployed EHR technology, only 13% of solo practices are using it, he said.

"This is a large gap," Brailer said. "We have an obligation to level the playing field. We need a more direct or visible incentive."

Receiving incentives for using the technology is a top priority for many health care IT executives who are striving to incorporate EHR technology into their organizations' IT infrastructures.

Baylor Health Care System in Dallas has embarked on a $119 million clinical IT transformation that will span the next five years and include a move to EHRs, said James McPhail, the health care provider's vice president of enterprise services.

"We're hoping there will be some reimbursement relief from the government to promote the use of electronic medical records," he said.

Edward Zabreck, a solo practicing obstetrician in Houston, said he can't afford to invest in the EHR systems that vendors sell to larger practices. Since manual data entry for government programs like Medicare would be eliminated by physicians using EHRs, the government should offer incentives for using the technology, he suggested.

"With incentives, maybe I would be able to do it," Zabreck added. **52710**

Continued from page 1

Certifications

"Knowing someone has at least studied the concepts and has taken the steps to obtain the certifications gives that person a step up over someone who hasn't," said Garrow, who added that he would like Mohegan Sun's five IT project managers to become certified. "If we're ever going to get good at project management, we've got to have a pool of resources who can at least address the fundamentals of this type of work."

Garrow's thirst for certified project managers mirrors the kind of resurgence that IT certifications have been experiencing over the past six months. After the recession of the early 2000s and the resulting decline in IT spending, overall demand for some IT certifications began to soften.

"Employers felt they were held to ransom by people with certifications, and the value proposition dropped," said Martin Bean, chief operating officer at New Horizons Computer Learning Centers Inc., a computer training company in Anaheim, Calif.

TRACEY KROLL

DAN GARROW of Mohegan Sun says, "If we're ever going to get good at project management, we've got to have a pool of resources who can at least address the fundamentals of this type of work."

BY THE NUMBERS

- CompTIA Linux+ certifications grew by 15% in 2004 vs. 2003.
- CompTIA has issued roughly 13,000 Security+ certifications worldwide since the program was launched in December 2002.

SOURCE: THE COMPUTING TECHNOLOGY INDUSTRY ASSOCIATION INC., OAKBROOK TERRACE, ILL.

Uptick in Demand

But Bean has seen demand for certification courses pick up over the past 12 months, particularly in disciplines such as information security and project management.

"We're weathering our first dip that the certification industry has seen, and we think it's coming back," said Brian McCarthy, chief operating officer at The Computing Technology Industry Association Inc. (CompTIA), an Oakbrook Terrace, Ill.-based trade group that has certified nearly 750,000 IT professionals.

A case in point: 2004 demand for CompTIA's Security+ certification was 28% to 30% higher than expected, and demand for its Linux+ and Project+ certifications also remains strong, McCarthy said.

Now that demand for certification is picking up strength, CompTIA is looking to add certification classes for radio frequency identification and voice over IP. McCarthy said he isn't sure when those courses might be introduced.

Sean Jameson, chief information technology officer at New York University's School of Continuing and Professional Studies, said he believes certification "elevates [a] person in the rankings if they have been awarded or vetted by a particular program or body that they can do what they say they can do." Jameson is currently looking to fill a J2EE Web developer position, "and it would be a huge plus [for a candidate] to have a certification," he said.

Not all CIOs are adamant about hiring people with technical certifications. Hank Zupnick, CIO at GE Real Estate in Stamford, Conn., said that although he does seek people with critical project management skills, experience carries more weight with him than certifications.

"What I look for more than certification is a track record of success and an understanding, commensurate with position level, of the challenges to bringing a project in on budget, on time and on quality," said Zupnick.

"Certifications really aren't a big issue for me," added David Dart, managing director and CIO at New York-based HVB America Inc., a division of banking and financial services firm HVB Group.

Dart said his data security director recently picked up an information security certification, but that was based on a personal preference. **52686**

Helping CIOs Certify ROI

Alinean LLC and IDC last week jointly introduced a certification course aimed at helping IT executives measure the business value of existing and proposed IT projects.

The ValueExpert IT Value-Chain Management Certification course is designed to help CIOs and other IT executives determine when, whether and how much to spend on IT initiatives based on analyses of return on investment and total cost of ownership.

Bill Johnston, president of Orlando-based Alinean, said 95% of Alinean and IDC clients do some form of ad hoc ROI analysis, often using spreadsheets, when they purchase technology. And although some IT organizations use ROI tools or have set up metrics to analyze technology investments, IT managers often lack the training needed to conduct thorough ROI or TCO analyses, he said.

Alinean and Framingham, Mass.-based IDC, a provider of IT market research services, plan to offer the first certification courses in Orlando on Feb. 24 and March 31, followed by courses in New York and Boston in May and June, respectively.

– Thomas Hoffman

WE MAKE IT WORK

FOR SCALE OUT SERVER SOLUTIONS

Businesses need to boost the performance of their servers without overwhelming their budgets. The good news is that Insight can help you do more for less. Our server experts can devise a 'Scale Out' solution that allows your business to improve availability, performance and manageability while minimizing the overall capital investment. Find out how Insight can help your IT dollars go farther.

COMPREHENSIVE IT SERVICE CAPABILITIES

- Advanced Integration
- Asset Management
- Custom Configuration
- Connectivity
- Enterprise Consulting
- **High Performance Systems**
- Implementation Services
- Leasing
- Managed Services
- National Repair Center
- Network Solutions
- PC Refresh
- Project Management
- Resource Management
- Security
- Software Licensing
- Storage
- Trade-In & Asset Disposal
- Training
- Warranty Programs
- Wireless Solutions

ROBUST PRODUCT SELECTION

200,000+ Products

1,500+ Manufacturers

CASE STUDY:
High Gear Growth

An ambitious growth goal drove an electronics manufacturer in the Midwest to partner with Insight for its complex server scale out project. Insight offered a centralized point of service from expert assessments on the front-end to planning and implementation in the field. The end result is impressive: Transaction speeds went from four hours to 20 minutes. Now, that's putting growth into high gear.

hp invent

Insight

IT For The Way You Work

www.insight.com/CW ▼ 800.998.8052

Source Code: AD021
Insight and the Insight logo are registered trademarks of Insight Direct USA, Inc. IT For The Way You Work is a trademark of Insight Direct USA, Inc.
All other trademarks, registered trademarks, photos, logos and illustrations are property of their respective owners.
©2005 Insight Direct USA, Inc. All rights reserved.

Need Proof of Storage Interoperability?

See Multi-Vendor Interoperability at Work at the World's Largest Storage Solutions Demonstration!

SNIA
STORAGE NETWORKING WORLD
COMPUTERWORLD

Interoperability & Solutions DEMO

Uniting the World of Storage

April 12-15, 2005
JW Marriott
Desert Ridge Resort
Phoenix, Arizona

The Storage Networking World (SNIA) multi-vendor Interoperability & Solutions Demo, taking place April 12-15, 2005, in Phoenix, offers you the opportunity to see interoperability in a collaborative and vendor-neutral setting. Whatever your needs – whether it is managing storage with SNIA SMI-S, building on top of an information Lifecycle Management foundation, or selecting the right building blocks to meet industry regulations – this is the place to see feature sets, supported solutions and interoperability. Come prepared to get your hands dirty because this time around you'll also get a chance to participate in one of several pre-scheduled hands-on labs featuring exercises involving IP Storage and Storage Virtualization products.

Theme Areas in the SNW Interoperability & Solutions Demo:

- **Data Management**
- **Data Protection**
- **Regulatory Compliance and Storage Security**
- **SAN Infrastructure**
- **Storage Management**
- **IP Storage**
- **Storage Virtualization**

Companies planning to participate at the Spring 2005 Interoperability & Solutions Demo include: (as of 2 17 05)

Produced by:
COMPUTERWORLD SNIA

To register to attend Storage Networking World and see the Interoperability & Solutions Demo, visit **www.snwusa.com**

Health Care CIO Runs 'Internal' RFID Test

BY HEATHER HAVENSTEIN

John Halamka, CIO at both CareGroup Inc. and Harvard Medical School, is testing radio frequency identification technology — on himself.

An RFID chip that is the size of two grains of rice and encased in a glass container was implanted in the back of Halamka's right arm, near the elbow, just before Christmas. Halamka said this month that when the chip is scanned by an RFID reader, an identifying number directs physicians to his medical records, which are stored electronically at CareGroup's Beth Israel Deaconess Medical Center in Boston.

The chip was inserted with a needle in a procedure that took about five minutes. Halamka, 42, said he's testing the technology for its potential to help health care workers get critical medical information about unresponsive patients.

HALAMKA says the implanted chip doesn't raise privacy concerns.

For example, Halamka noted that he is an avid mountain and ice climber. "If I fall and I'm not responsive, wouldn't it be extraordinarily helpful for the people who rescue me to know who I am and my medical history?"

Halamka, who has a medical degree and works as an emergency-room doctor at Beth Israel, said he isn't advocating that people get injected with RFID chips. But he added that he decided to try the technology himself partly so he could describe the experience to patients who want to undergo the procedure.

Halamka is confident that the implanted RFID chip, which was designed to last 100 years, doesn't raise data privacy concerns, because it contains no medical records — only the identifier that points to his records. "There is no way just from reading my tag for a merchant to know who I am," he said.

Halamka's chip was made by VeriChip Corp. in Delray Beach, Fla., and was cleared by the U.S. Food and Drug Administration for medical use in October.

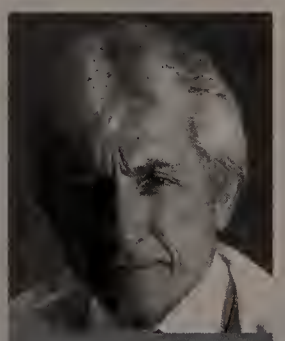
Roger Kay, an analyst at IDC in Framingham, Mass., said the needed technology infrastructure — mainly scanners — is not installed widely enough to support the use of RFID tags in a large number of patients.

But Kay said the idea is becoming feasible from a cost standpoint. "The cost of the individual chips is coming way down, to the point where it becomes practical to have chips on individual items, including people," he said. 52554

DON TENNANT

Masters of Frustration

WHEN I SPEAK at any length with IT executives, I ask them to identify their biggest frustration in aligning business and IT — the task that is, after all, their raison d'être. The most frequent response I hear is education. Universities, they moan, are failing to graduate students who have both the business and IT management skills that companies desperately need.



DON TENNANT is editor in chief of *Computerworld*. You can contact him at don_tennant@computerworld.com.

It seems that many universities have heard their lament, because schools are finally beginning to do something about it. The cause is being championed by farsighted educators like Louis Lataif, dean of Boston University's School of Management.

Lataif is passionate about BU's role as an enabler of business-IT alignment, and specifically about the School of Management's contribution: a dual-degree graduate program called the MS-MBA. Those who enter the intensive, 21-month program earn both an MBA and a master of science in information systems. According to Lataif, combining the MBA and MSIS programs was a no-brainer.

"The next generation of CEOs is coming from IT, not from finance," he says. "What business problem do you know that isn't being solved by technology?"

BU's MS-MBA program began in 2001 and will yield its third class of graduates in May. The original idea, Lataif says, was for the MS-MBA to replace the MBA at BU within five years. "But too many oxen were being gored," he says, referring to the discomfort being felt among stakeholders in the status quo. For now, MS-MBAs constitute roughly half of BU's graduating MBAs, and Lataif is pragmatic about the future. "Let the market vote," he says.

I've spoken with a couple of BU's MS-MBA students, and they've certainly cast their ballots.

"I came in more as a doubter. I was questioning whether it would set you up to be the tech guy in your group who would always be the go-to guy for the grunt projects," says 27-year-old Calder Cruikshank, a former financial analyst at Johnson & Johnson who will graduate from the program in May. But now he's convinced that he made the right move and that others who don't follow suit are missing a golden opportunity. "You'll never have time to get as deep as you do in this program during the rest of your career," Cruikshank says.

Mark Michaud, who will also graduate in May, says he began the program expecting to go into product marketing. But Michaud now wants to pursue an "IT relationship role" because he wants to be "at the center of aligning business strategy with IT objectives and capabilities."

That's music to the ears of corporate recruiters like Lonny Spitz, a recruiting manager at BearingPoint who has already hired six BU MS-MBA graduates and wants to hire seven to 10 more this year for the consultancy's emerging middle markets practice. "The program is a perfect match for what we want to do," Spitz says. "My goal is to expand this throughout the rest of BearingPoint."

What's especially encouraging is that these intensive dual-degree programs that integrate an MBA with an MS degree in an IT-related discipline are being offered by a growing number of universities. The University of Delaware, the University of Michigan, the University of Pittsburgh, the University of San Diego, Creighton University and Loyola University are among them.

In fact, I'd venture to say we have a trend going here. So you might just be able to master that perennial frustration once and for all. **52643**

Don Tennant

VIRGINIA ROBBINS

Listen to Your Small Irritations

LOAN VOLUME was up 147%, IT costs were down 1%, staffing levels were stable, and we were moving forward with two exciting new projects.

But I still had a problem. I was frustrated by the frequency with which our call center opened late because of delays in early-morning processing. (The irony is that if the early-morning team hadn't been so good, I'd probably have no documentation on the numerous delays that they were facing.)

I discussed this with a colleague, and in summary, this is what he suggested:

1. Keep a diary for two weeks. Write down everything that irritates or frustrates you. Use these minor annoyances as signals of small problems.

VIRGINIA ROBBINS is CIO and managing director at Chela Education Financing in San Francisco. Contact her at v_m_robbins@yahoo.com.

2. At the end of two weeks, review each situation that came up and place it into one of three categories: people, processes or technology. For those situations that are people issues, determine which of these three questions apply: Do you have good people doing the wrong things some of the time? Or do you have one person doing the wrong thing most of the time? Or is everyone just doing things wrong? Write down your answers.

For those situations that are process-based, ask yourself: What would my best person do? Would he have followed the process? Or would even he have done something else?

As for items that land in the technology category, hold them aside until you've resolved the people and process issues.

3. Add up the number of situations in each category. If the largest number is in the process category, then it's time to review your implementation and audit plans. If people dominate the list, begin by taking a closer look at the people involved. If, as you think through

various situations, you keep coming back to the same person, it's time to talk to HR. If there are a large number of people on your list, then maybe it's time to *listen* to HR. They could have some very helpful advice.

4. Formulate a plan of action for one item on your list. Make validation your first step by checking with your peers, HR and perhaps your boss.

I applied this technique to my problem in the call center. My plan of action included asking people why they thought we had opening delays. What I found out is that not everyone shared my belief. Some of the staff believed that the early-morning delays weren't that material. So, knowing that our bonuses are built around costs, I asked HR if I could publish a per-minute cost for early-morning operations.

Once all the staff members became aware of the costs, it became clear to them that the delays could have a material effect on their bonuses. I also had a long-standing employee issue that needed to be dealt with. After publishing the numbers and resolving the staffing issue, groups that were indirectly contributing to the delays became more interested in reducing the delays, and they did so.

By paying attention to how I was reacting in small ways, by linking feelings and data, I was able to see problems I hadn't seen before and reduce my frustrations, while helping the business become even more efficient. **52619**

MICHAEL GARTENBERG

Rules for The Road

USING TECHNOLOGY on the road has changed a lot over the years. In times gone by, I traveled with a bag loaded with the necessities of the day, such as a pair of wire strippers, so I could rewire the hotel phone in order to get a line out, and a set of acoustic couplers, so I could actually get online if there was no modular phone. I was grateful if it all worked somehow. Today, I get grumpy if there's no high-speed access, and frankly, I prefer a good Wi-Fi signal so I'm not tethered to a desk that's not ergonomically suitable.

Life on the road has indeed gotten a lot better, but it's also more imperative these days to be able to keep in touch. There are a few strategies and tools that can make your life on the road (or the lives of those you support) better and keep you (and them) connected.

When I travel, I think redundant systems. Back at the office, you don't have just one server and a single method of access, do you? You shouldn't work that way on the road, either. That's why I like to make sure that I have at least two ways of getting online, so when I get to the hotel and discover that its broadband is down and dial-up is flaky, I can still get to my e-mail. Actually, I prefer to have at least two backup systems, so I carry a dedicated e-mail device that can also make phone calls and a cell phone that can download e-mail in a pinch.

MICHAEL GARTENBERG is vice president and research director for the Personal Technology & Access and Custom Research groups at Jupiter Research in New York. Contact him at **mgartenberg2@optonline.net.** His weblog and RSS feed are at **http://weblogs.jupiterresearch.com/analysts/gartenberg.**

I've also learned to bring everything I need but nothing more. I've mentioned before that my company's research shows that most folks don't want to carry on their persons more than three devices and prefer to carry only two. Decide what those two are for you, given your agenda (most people like to keep their cell phone on them and then carry either a PDA, a digital camera or a portable media player), and keep the rest of the stuff in your laptop bag. My road gear consists of a laptop, a PDA, an e-mail gadget, a phone, a camera and a media player. Context will determine what I need at a given moment, and redundant functions are built into the mix. For example, three of them make phone calls, four of them can do e-mail, two of them can take pictures, and three of them can play back media and entertainment.

One of the hassles of schlepping technology is the need to recharge. Hotels just aren't designed for this. I've been in places where I had devices hanging off the desk, lying under the bed and dangling in the bathroom. Fortunately, there's a solution to this problem. Most cell phones, PDAs, e-mail devices and the like can be charged through the USB ports on your computer. Invest in some USB-powered cables and leave the heavy power adapters at home. The best ones have an autoretract feature that keeps them nice and neat in your bag until you need them. You'll save a lot of room in your bag, and you'll be less likely to leave a charger or device in your hotel room.

Staying in touch isn't a luxury these days; it's a necessity. A little planning and packing can ensure that you stay connected without having to bring along your help desk. **52577**

WANT OUR OPINION?

More columnists and links to archives of previous columns are on our Web site:
www.computerworld.com/columns

READERS' LETTERS

Pols May Be Stooges, but China's No Joke

I READ with interest Don Tennant's editorial of Feb. 7 titled "The Three Stooges" [QuickLink 52310]. Lord knows I have no confidence in this Congress making any sort of informed decision on technical issues, and I consider the concern about military and national security aspects of Lenovo Group's purchase to be misplaced, or at least not so serious as to require congressional action. But the article seems to be trying to convey the impression that there's absolutely nothing to worry about, and I don't think that's realistic either.

My concern isn't with national security, but rather loss of technical hardware and especially software intellectual property. U.S. companies seem to think they can deal with the Chinese government and Chinese corporations (effectively, the same thing) on the same basis they deal with U.S. companies – that contracts are binding and that agreements protecting intellectual property, trade secrets, etc. will be honored.

Experience is being painfully gained – too slowly – to disabuse them of that belief. There is no perceived disadvantage to violating such agreements as soon as it is of benefit to either China itself or the Chinese corporate entity involved, and nothing will be done by the current administration to invoke WTO or other sanctions to protest such violations.

I wouldn't let any process, procedure or sensitive information that I valued ever be transferred to a Chinese corporation. I can only hope that the executive management of U.S. companies will learn to carefully examine and consider any agreements that release such information to "partners" in China.

David M. Ihnat
President, DMINET Consulting Inc., Chicago

AMEN! Brother, you couldn't have stated the problem any more clearly. It's shocking that those in power are so ignorant of the facts. In addition, they seem to be aided by an even less-informed and willing accomplice – the national media. Keep telling it as it really is.

Stephen W. Conners
IT technical systems integrator, Indianapolis

AS ANOTHER former expatriate, I greatly enjoyed the column. However, Tennant makes too much sense for politicians to pay attention. Remember, these are the same people who reduced your Social Security benefits while at the same time claiming that they never would do such a thing. Surely you don't expect either honesty or common sense out of these folks.

Andrew H. Olson
Managing director, Team International Group, Gainesville, Fla.

They Shoot Hard Drives, Don't They?

FOR MANY YEARS, my friends and I have "reformatted" hard disk drives we intended to dispose of with a variety of hardware-based solutions. We found the most effective to be a Colt .45 ACP handgun, a Para-Ordnance .40 handgun, a Colt AR-15 (5.56mm) and an M1 Garrand (7.62mm). We experimented with shotgun loads, but they failed to penetrate the platters. The handgun and rifle rounds penetrated completely, leaving a sizable warped area and burr around the penetrations. So "Kill Your Data" [QuickLink 52155] isn't that much of an exaggeration.

John Libertine
Boston

E-voting's Problem

ELECTRONIC VOTING, being unverifiable, is not suitable for democracy [Readers' Letters, QuickLink 51244]. In traditional elections, we keep and count the vote itself (the ballot). So traditional election results are verifiable. In electronic elections, we store and count a record of the vote. The vote itself cannot be verified, and thus we must passively accept any result we are given. Since the object of elections is giving the power to rule nations, we need elections to be verifiable. I say e-voting is not only a technical problem but a social one.

Emanuele Lombardi
Unix system manager, Bracciano, Italy

COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

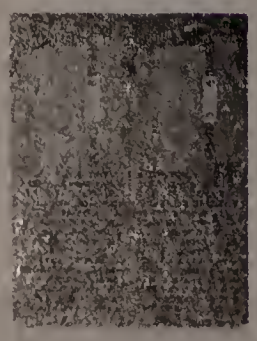
For more letters on these and other topics, go to
www.computerworld.com/letters

intel inside
ITANIUM 2

When business changes, your servers will understand.

Presenting HP's Integrity servers, designed to keep your business agile during changing times. Strong and stable, HP Integrity servers powered by reliable Intel® Itanium® 2 Processors are built for your most critical business needs. Increased power and advanced management capabilities allow you to optimize, consolidate and integrate as your business grows. So you'll always be prepared for change, whether it's big, small or unexpected.

change + hp



HP integrity servers

Solutions for the adaptive enterprise.™

hp invent

For more information on managing complex multi-OS environments with HP Integrity servers, visit hp.com/go/integrity1

© Copyright 2003 Intel Corporation. Intel, the Intel inside logo, and Itanium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

E-meeting systems have evolved into more than ways to save time and money on travel. We see how three companies are finding that they can track and shape projects as they produce more-focused meetings.

Meet Me IN CYBERSPACE

BY LINDA ROSENCRANCE

VIRTUAL MEETINGS conducted over the Internet were once viewed as little more than a clumsy stopgap when time or the company travel budget made in-person meetings impossible. But improved technology that streamlines workflow, facilitates knowledge management and allows corporations to do more in less time and at a lower cost has transformed e-meetings into one of the best choices for many kinds of group communication, according to users.

Features of e-meeting software can include integrated audio- and video-conferencing, application sharing with markup capabilities, real-time feedback, whiteboards, instant surveys and text chat. In addition, some technologies automatically record meetings for editing and playback and store recordings and materials such as agendas, minutes and presentations for easy retrieval.

"We're just now seeing the point where e-meetings are getting on the mainstream radar — where it has become the norm for facilitating conversations or conferencing, instead of the exception," says Peter O'Kelly, an analyst at Burton Group in Midvale, Utah.

And as the software and interfaces have become more sophisticated, it has become easier for people to start using tools effectively, O'Kelly says.

But there are some things a company should look out for when moving to virtual meetings, says Eli Mina, a Vancouver, British Columbia-based management consultant. Virtual meetings work better in small groups, and it's more difficult to build trust and team cohesion when people can't see or hear one another, he says. E-meetings also reduce flexibility, making some interactive discussion techniques, like breaking into smaller groups, almost impossible.

To evaluate how the benefits and disadvantages of virtual meetings stack up in real business situations, *Computerworld* took a look at how three companies are using virtual meeting software.

Wyndham International: Beyond Training

Dallas-based Wyndham International Inc. initially turned to Centra Software Inc.'s real-time online collaboration tool to facilitate employee training in its new property management system. The hotel chain soon decided it could save time and money using Centra's e-meeting application as well.

Since Wyndham started using Lexington, Mass.-based Centra's software four years ago, it has saved more than $1 million in travel-related and telecommunications expenses, says Mark Eggers, manager of online learning at the company.

"We use it for weekly and monthly conference calls, and because it's voice over IP, we save about $10,000 to $15,000 a month on our telephone bill," Eggers says.

Centra's software enables application sharing, and it displays graphics, PowerPoint slides and spreadsheets. "We can show the information to people rather than just talking about it

on the phone," says Eggers.

Centra's c-meeting tool also brings back some of the etiquette to the process because people have to click on an icon if they want to speak, rather than cutting a colleague off while participating in a teleconference, Eggers says.

Centra's users can initiate an e-meeting by clicking on the Centra shortcut in their Windows task-bar notification area or right from their desktop, says John Walsh, senior vice president of engineering and operations. Participants can then attend a scheduled event by clicking on a link in their e-mail, calendar or instant message invitation, he says.

"Centra even allows outside vendors to participate in a Wyndham meeting," Eggers says. "We are on the Internet with the system, and they just come out to our system and get the client software on their machines. It takes a few minutes, and they're ready to go."

And the more people use it, the more they love it, Eggers says.

"Centra has done a very nice job of capturing a familiar user model," O'Kelly says. "So if I'm used to facilitating meetings with groups of people, I find familiar concepts when using a tool like Centra — like there's a podium, and there might be a seating chart, and people can raise their hands."

Bausch & Lomb: Eye to Productivity

Bausch & Lomb Inc. chose Documentum Inc.'s eRoom collaboration tool to bring together globally dispersed teams to develop new products, says Paul Loda, director of new product development at the Rochester, N.Y.-based eye care company. A maker of content management software, Documentum is a subsidiary of Hopkinton, Mass.-based EMC Corp.

"Before eRoom, people were flying all over the place to try and get some face time," Loda says.

Before the company purchased several hundred seats of eRoom in 2000, Bausch & Lomb's product developers would also waste time and money exchanging information via fax and e-mail, he says. In addition, numerous team and management meetings were often needed for product updates and approvals, he says.

Now all the product information is contained within eRoom, and each team member is given immediate access to every type of document and information in a common workspace on the Web, he says. Project leaders and team members communicate during the e-meetings via audio conference calls, Loda says.

On one project alone, Bausch & Lomb saved $30,000 on travel costs, while the total investment in eRoom — $10,000 for a server license and 15 licenses at $300 each — was under $20,000, he says.

"And just because of cuts in travel, people had more free work time to get more stuff done because they didn't have to sit in another meeting," Loda says. He adds, "I like the fact that everything is kept in one place and it's accessible anytime, anyplace, by anybody who you have given permission to get to it."

Real Time Services, the integrated component of eRoom's digital workplace, provides tools for real-time meetings, presentations and collaboration, according to Documentum. RTS works via a standard Web browser and doesn't require client installation for meeting attendees.

The service provides capabilities for group edits, whiteboard sessions, real-time discussions and one-to-many presentations. This enables distributed teams to work simultaneously on projects and to capture, index and reuse the collective output of each session, says Lance Shaw, director of product marketing at Documentum. In addition, RTS lets users share their desktops and allows participants to access applications on them remotely, he says.

ERoom members log into a session with a name and password. RTS also gives nonmembers invited to eRoom access to meetings via a secure URL, Loda says.

Steelcase Inc.: Global Teamwork

Office furniture company Steelcase Inc. in Grand Rapids, Mich., uses Groove Networks Inc.'s desktop collaboration software, Groove Virtual Office, to connect virtual teams with members in locations around the world, says Florent Burion, international CRM team leader at Steelcase. But the software provides more than a link, he says.

"Groove's meetings tool really helps us structure the meeting process — and makes sure everybody in a team is using that process in a simple but disciplined fashion," Burion says.

And it has cut down on face-to-face meetings, he says.

"We have some Web development teams with very tight time frames, including the team in charge of renovating our corporate Web site," Burion says. "The team leader wanted to get the whole team up to speed quickly without having to have lots of team-building or lots of face-to-face meetings."

In addition, Burion estimates that Steelcase has been able to save 20% to 40% on travel time, though Steelcase hasn't tracked exact figures on time saved or costs cut.

Virtual Office lets teams contextually share files, manage projects and coordinate business processes by allowing them to do things like mark up documents and show PowerPoint presentations within secure workspaces synchronized across all team members' PCs, says Michael Helfrich, Groove's vice president of product management.

The software's decentralized architecture enables teams to work online, off-line and across firewalls — in real time and independently — while freeing IT departments from costly server and network infrastructure requirements, Helfrich says. Groove's virtual meeting tool allows users to communicate via instant messaging, chat or voice-over-IP systems.

A meeting wizard takes users through the process of creating a meeting and inviting team members. Once a meeting is created, any participant can add agenda topics, create action items, attach files and record minutes from a tabbed interface.

Such features, available in Virtual Office and other e-meeting software systems, have gone a long way toward breaking down barriers to user acceptance, according to analysts.

"We have been using the meetings tool extensively, and everywhere it has been used, we have definitely noticed an increase in productivity and alignment of teams," Burion says. "In the Groove satisfaction survey we are conducting at the moment, the meetings tool is among the most-often-used tools and rated highly in terms of usefulness." **52102**

E-meeting Musts

Presence awareness • Whiteboarding • Application sharing • Document sharing • Markup tools for annotation • Audio via IP or public switched telephone network • Security • Text chat

Recording/playback capabilities • Calendar integration • Video

PROS AND CONS OF VIRTUAL MEETINGS

Si Mina, a Vancouver, British Columbia-based management consultant, has outlined the advantages and drawbacks of e-meetings.

PROS

REDUCED COSTS: A virtual meeting is generally less expensive than a face-to-face meeting. The costs of travel, meals and accommodations are eliminated.

REDUCED DISRUPTIONS: Participants don't have to change their schedules or travel to a different location – or even leave their offices.

ENHANCED SENSE OF PURPOSE: Recognizing the limitations of a virtual meeting, it's easier to establish the need for focused discussions.

ENHANCED OBJECTIVITY: Unless videoconferencing is used, participants aren't distracted by the facial expressions of others. This has the potential of forcing introspection and critical thinking in private.

CONS

GROUP SIZE: Whereas virtual meetings can work well for small groups, they are usually difficult to manage with large gatherings.

REDUCED FLEXIBILITY: In a virtual meeting, it's impossible to break into small groups or employ other interactive discussion techniques.

NO SOCIAL INTERACTION: The interpersonal chemistry and synergy that develops in face-to-face meetings are lost in a virtual meeting. It's much more difficult to build trust and team cohesion when people can't see or hear one another.

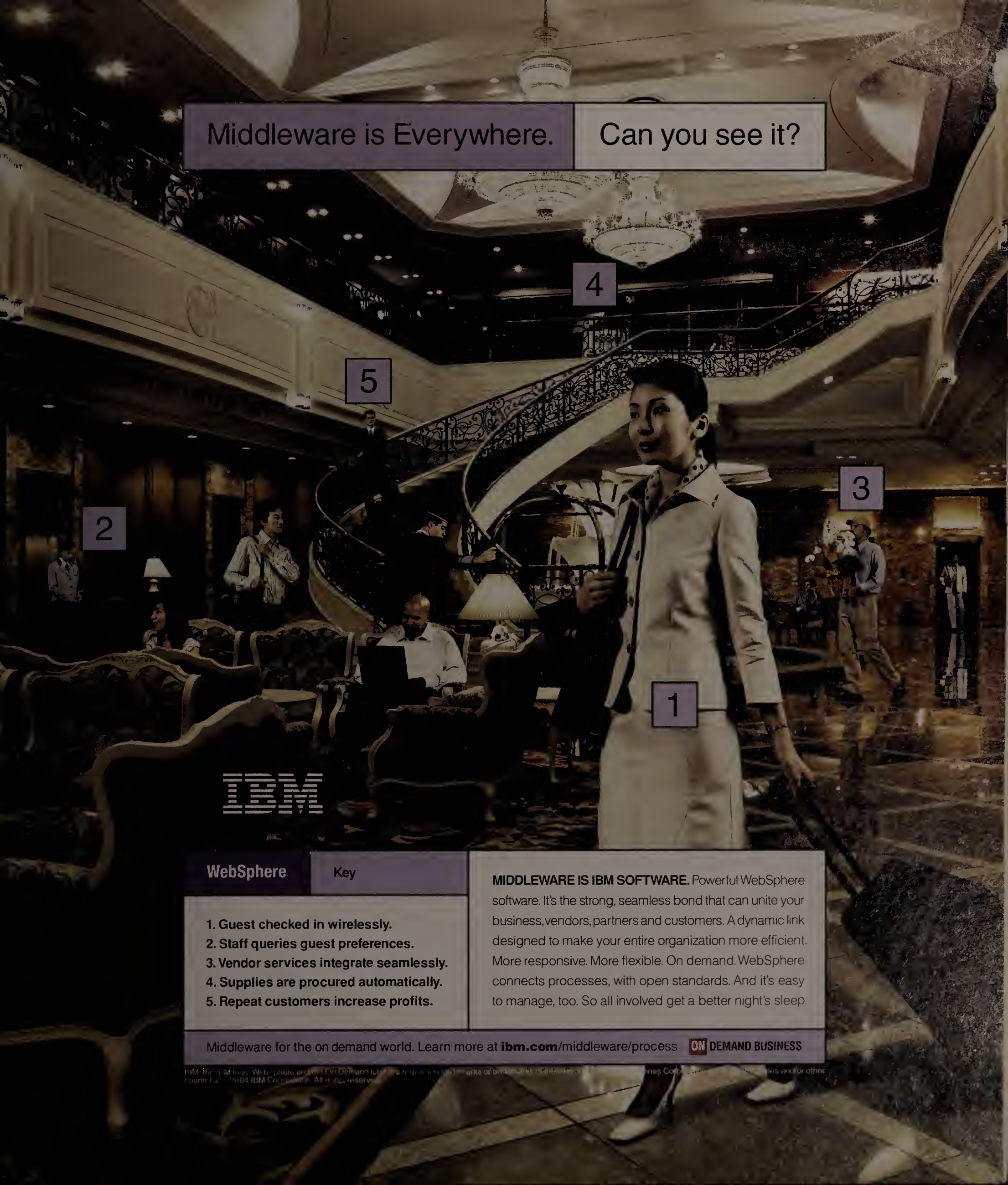
UNIQUE CHALLENGES: It can be difficult to identify who is speaking, establish a speaker's lineup, ensure equality and fairness, and count votes.

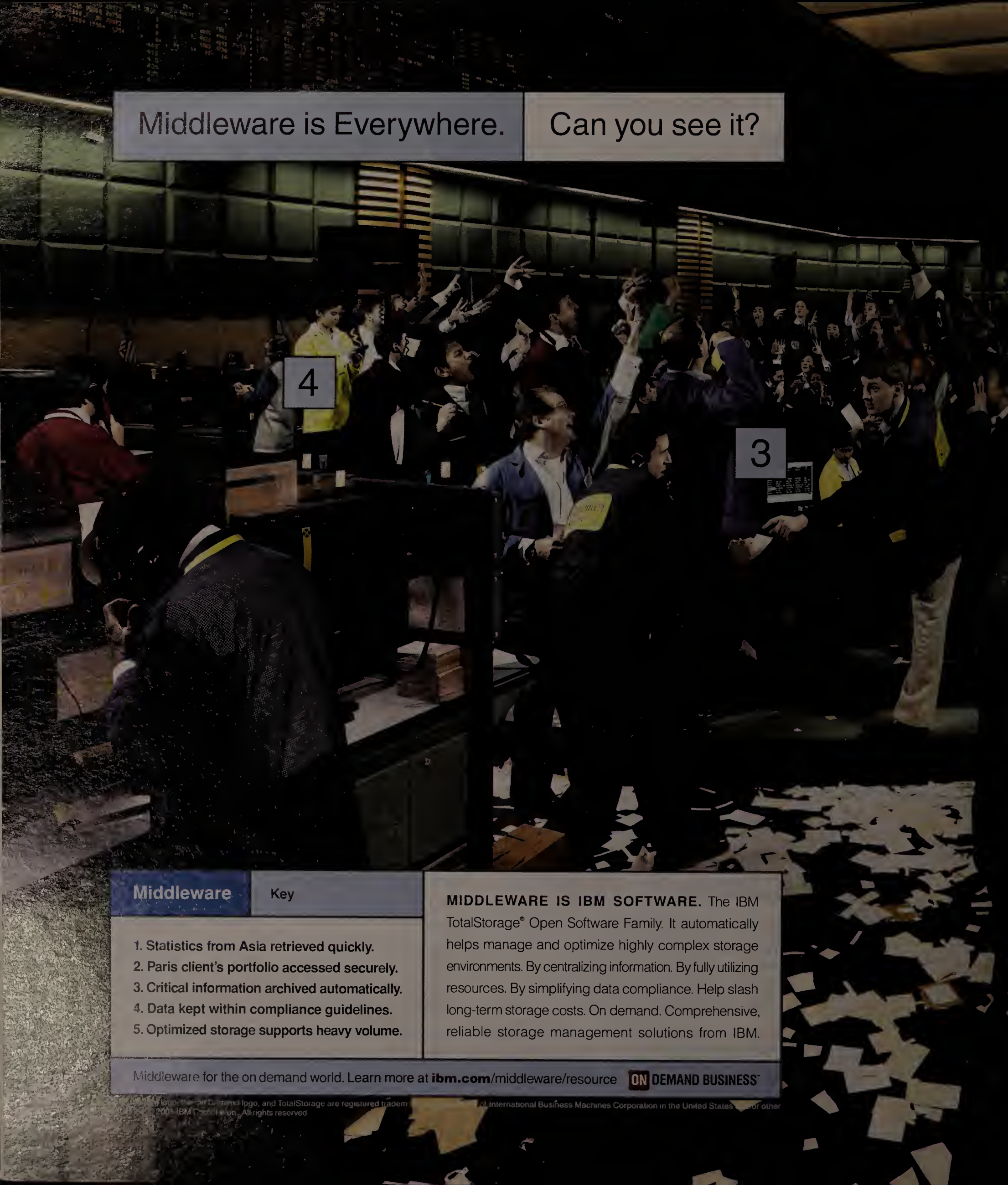
– Linda Rosencrance

RE-ENGINEERING THE USER

OUR TAKE: Tommy Peterson says software used for e-meetings can change the people who use it:

QuickLink 46981
www.computerworld.com


Middleware is Everywhere.
Can you see it?
4
5
2
3
1
IBM
WebSphere
Key
1. Guest checked in wirelessly.
2. Staff queries guest preferences.
3. Vendor services integrate seamlessly.
4. Supplies are procured automatically.
5. Repeat customers increase profits.
MIDDLEWARE IS IBM SOFTWARE. Powerful WebSphere software. It's the strong, seamless bond that can unite your business, vendors, partners and customers. A dynamic link designed to make your entire organization more efficient. More responsive. More flexible. On demand. WebSphere connects processes, with open standards. And it's easy to manage, too. So all involved get a better night's sleep.
Middleware for the on demand world. Learn more at ibm.com/middleware/process
ON DEMAND BUSINESS


Middleware is Everywhere.
Can you see it?

Middleware
Key
1. Statistics from Asia retrieved quickly.
2. Paris client's portfolio accessed securely.
3. Critical information archived automatically.
4. Data kept within compliance guidelines.
5. Optimized storage supports heavy volume.
MIDDLEWARE IS IBM SOFTWARE. The IBM TotalStorage® Open Software Family. It automatically helps manage and optimize highly complex storage environments. By centralizing information. By fully utilizing resources. By simplifying data compliance. Help slash long-term storage costs. On demand. Comprehensive, reliable storage management solutions from IBM.
Middleware for the on demand world. Learn more at ibm.com/middleware/resource
ON DEMAND BUSINESS™
logo, and TotalStorage are registered tradem
International Business Machines Corporation in the United States
IBM
All rights reserved

5
2
1
IBM

BRIEFS

Xiotech Announces 3D Storage Array

■ Xiotech Corp. in Eden Prairie, Minn., last week announced its Magnitude 3D 1000e, an entry-level version of its Magnitude 3D storage array. Capacity and performance in the array scale independently, allowing users to avoid overprovisioning, according to Xiotech. The Magnitude 3D 1000e has a maximum capacity of 19.2TB. Pricing starts at $40,000.

BugScan Integrated Into Logidex App

■ LogicLibrary Inc. in Pittsburgh has completed the initial integration of its Logidex mapping and discovery engine plug-in with the BugScan technology it acquired last fall. Logidex represents complex enterprise application development environments graphically, LogicLibrary says. BugScan's 3-D interface lets developers see each application at the business level and identify questionable security components. Integration of BugScan into Logidex-supported integrated development environments is scheduled to be completed by April. BugScan is still available as a stand-alone product.

Artemis Upgrades IT Financial Suite

■ Artemis International Solutions Corp. in Newport Beach, Calif., has launched a new version of Artemis 7, its IT financial management package. Version 6 includes performance-based budgeting capabilities that let IT organizations create budgets that are linked with corporate goals, Artemis says. The browser-based software is designed to help IT organizations measure the full costs of resources needed to support projects, and it can capture hardware and software life-cycle costs. Version 6 of Artemis 7 starts at $50,000 for a proof-of-concept system; full implementations typically cost more than $1 million.

ROBERT L. MITCHELL

Municipal Wireless Madness

WHAT WOULD YOUR BOSS SAY if you proposed providing low-cost wireless broadband access to the public in your local industrial park? You'd probably be sent packing — unless you're an IT manager for a municipality. In that case, providing Wi-Fi- or WiMax-based broadband access to your neighbors downtown is a hot topic.

ROBERT L. MITCHELL IS *Computerworld*'s senior features editor. Contact him at robert_mitchell@computerworld.com.

As an increasing number of municipalities consider going into the wireless broadband business, the New Millennium Research Council issued a report [QuickLink 52381] this month concluding that municipal wireless services aren't necessarily a good thing. Supporters of the idea fired back, stating that the NMRC research was commissioned by Issue Dynamics Inc., a lobbying firm for the major telecommunications companies. But whether the report is biased is really beside the point; you don't need a study to know that turning the IT organizations of municipalities or any other government entity into vendors of wireless services is a bad idea.

The NMRC report — and legislative efforts by the telecom industry to block municipalities from pursuing such projects — have changed the focus from whether it's a good idea for municipalities to provide such services to whether they should have the right to provide those services at all.

In cities with municipal wireless initiatives, the IT organization will have a major distraction from its core mission. Even large, well-run companies that stray from their core business models by diversifying into new markets often fail — a phenomenon that stock market guru Peter Lynch calls "diworsification."

A municipal IT department that moves from supporting its internal client base to selling low-cost broadband services to the public is clearly changing its mission. It's moving from an IT support role to selling a service and building and maintaining a wireless broadband infrastructure. It's moving from a bureaucratic model to a business model. And it's creating a quasi-monopoly by using tax dollars to fund a low-cost access scheme.

Even if a municipality succeeds, creating a price structure with a zero or below-market margin is likely to hamper a transition to competitive alternatives, leaving customers with a government utility that's likely to be less responsive than a private business. Would anyone really rather talk to city hall when his broadband connection fails? And those low prices won't help the city continually upgrade and rebuild its wireless infrastructure as technology leaps forward. If municipalities had done this five years ago, I'd wager that they'd still be using 2Mbit/sec. 802.11 technology.

Municipalities are jumping in now because offering wireless access on the cheap to the public is politically popular and looks easy. But surely there are reasons why private business hasn't developed such networks. The barriers to entry appear to be low, but what are they over the long term? Can a government utility justify a massive investment in wireless infrastructure at a time when the technology is changing rapidly? The fast pace of those advances and market shifts going on in telecommunications today are swallowing up companies like AT&T whole. Can municipalities really do better? If you think the protected, regulated monopolies of the Baby Bells were slow to offer DSL in the late 1990s, what will municipalities do when it's time to change everything out?

Given local governments' desire to get involved, one would assume that there is some pressing social need that private enterprise has not met that justifies such an investment. In that case, governments traditionally offer market incentives such as tax breaks or regulations that encourage private companies to provide desired services.

For example, the Bell operating companies were given monopolies in exchange for providing universal access to telephone service, even for customers in the most remote areas. But some municipalities are forming public wireless broadband utilities to compete with private service providers in an effort to offer wireless access in city centers and urban neighborhoods where wired broadband access is already available.

City-funded wireless broadband networks continue to pop up with great fanfare precisely because they will serve large concentrations of voters. Such political moves sell well today, but when the full bill comes due, the budget ax will fall. These networks, if they survive, will spin off into private hands, where they should have started in the first place. In the end, the only sure winners in this whole affair will be the vendors that sell wireless networking equipment. **52647**

WANT OUR OPINION?

For more columns and links to our archives, go to **www.computerworld.com/opinions**

SONY®

Data Armor.

Your business deserves the best protection you can get: Data Media from Sony. Our A3MP Advanced Alloy Armored Metal Particle technology resolutely guards your data on our new LTO™ Ultrium™ 3 cartridge. And our Super Orientation technology optimizes every 1 and 0. Sony offers the same level of vigorous data protection in all of our half-inch data storage formats. Sony even protects your peace of mind with our Media Suite℠ services — including bar coding, training, transfer and migration, and workmanship limited warranty — to increase your productivity and protect your most valuable information. Plus, our Storage Rewards℠ customer loyalty program enhances your bottom line with valuable assets and incentives. So protect your business and protect yourself. With Sony Data Media.

For more information on Media Suite services and our Storage Rewards program, visit **WWW.SONY.COM/LTO3**. Register today for our free web-based LTO3 training and receive a free LTO3 cartridge when you complete your training!

LIKE NO OTHER™

Media Suite

DLTtape™ | DLTtape™ VS1 | SuperDLTtape™ | LTO1™ | LTO2™ | LTO3™ | SAIT™

MORE FROM YOUR NETWORK

MEANS MORE POWER MORE AFFORDABLY.

ProCurve Networking by HP offers a range of affordable gigabit-enabled switches that is second to none. That means you can get better performance from your network along with better performance from your networking dollars. Downloads that used to take minutes can now be done in seconds. And you can do it for cents. Not dollars. That's high-availability gigabit performance at the edge—not just the core of your network. What's more, ProCurve gigabit-enabled switches are backed by a lifetime warranty*—perhaps the best in the industry. More affordability. More choice. More productivity.

HP ProCurve SWITCHES: 2800, 3400, 4100 AND 5300 SERIES

- Open standards enabling interoperability and ease of integration
- Flexibility of stackable or chassis configuration
- Lifetime warranty*
- Low cost of ownership
- Legendary service and support

Find out how to get the power of gigabit for less.
Visit **www.hp.com/networking/gigabit** for our latest gigabit promotions.

ProCurve Networking
HP Innovation

CLICK **www.hp.com/networking/gigabit** CONTACT **your local HP reseller**

*Lifetime warranty applies to all ProCurve Products, excluding the ProCurve routing switch 9300m Series and Secure Access 700wl Series, which have a one-year warranty with extensions available.
©2004 Hewlett-Packard Development Company, L.P.

ANN STATES

Former CIO **Doug Lewis** tells how to put together an IT strategic plan that will make a difference, even if your company is strategy-challenged.

THE IT STRATEGIC PLAN

IT MENTOR

"DOUG, WE NEED a strategic plan for IT." Over my career as a CIO in a number of Fortune 100 companies, I heard and dreaded those words many times. I knew they would launch a largely useless effort involving highly paid consultants and diversion of some of my best people. I knew the final product would be applauded by my management but never used to guide the actual deployment of my resources.

Think my experiences are unique? I'll bet you a very nice bottle of Merlot and a steak dinner that many corporate CIOs have the same stories to tell.

So, what's wrong? If strategic planning is a hallmark of good management, why are so many strategic IT plans never enacted? More important, how do you, as the CIO, avoid wasting your resources developing a

strategic plan that's never enacted, or, even worse, *is* enacted and results in a disastrous waste of resources?

There is a right and a wrong way to approach strategic and IT planning. The right way is to follow this sequence: goals, strategies, tactics, execution. Here's how it works: Goals lead to strategies. Strategies lead to tactics. Tactics lead to execution. Simple, but effective!

Goals are the major "whats" of the company's strategic plan. Strategic goals must be finite, measurable and tangible. There should no more than five, since most companies simply don't have the management bandwidth to execute against more. They are seldom in a company's high-sounding mission statement. Instead, they are the heart and soul of senior executives' bonus plans, from the CEO on down. It's amazing how linking bonuses to very specific goals creates a laserlike focus among senior executives.

Strategies are the top-level "how" of the plan. They tell how the people and financial resources of the company will be mobilized and directed to accomplish each of the strategic goals. By inference, they tell how those same resources *won't* be used. Typically, there will be one to three strategies for each goal.

Tactics are the low-level "how" of the plan. They tell every person and department what their roles will be in implementing the strategies and how they support the company's goals. Creating these tactics forces senior and midlevel management into a constructive dialogue about the realities of resources. It forces a conversation about what will be done and, more important, what won't be done. For example, if a task doesn't support a tactic, it must be refused.

Execution is simply carrying out the tactics. Good execution requires communication, project management, measurement, feedback and so on.

Here's an example from a former life:

GOAL

Become the lowest-cost producer of jet engines.

STRATEGIES

1. Reduce the time from engine concept to certification from eight years to four years.
2. Eliminate redundant engineering and manufacturing processes.

TACTICS

1. Form teams representing engineering, manufacturing and IT responsible for the design and manufacture of engine components.
2. Replace the current 12 CAD/CAM systems with a single system across engineering and manufacturing.
3. Deploy 2,500 engineering workstations to support CAD/CAM and to augment mainframe computing.

Notice the flow and the increasing level of specificity at each stage.

The Real World

Now let's assume your company is like 90% or more of today's corporations. There isn't a "real" strategic plan. Or, if there is, it doesn't pass the test of being executable, measurable and value-creating. What do you as the CIO do? You could build an IT strategic plan in the absence of a good company strategic plan, but you'd probably end up talking to an outplacement counselor sooner rather than later if you did.

DON'T GO IT ALONE

Compare notes with your No. 2 immediately following interviews with business leaders. It's amazing how two people hear and sense different messages from the same conversation.

Use the "tag team" approach in your presentation to the senior management team. Having someone to take notes and back you up when you miss a key point helps you and shows you trust your subordinates.

***Never* talk to the CEO about a dispute or problem you're having with one of his direct reports without having that person in the room and without having previewed the conversation with that person in advance.**

You could rile up the CEO by pointing out that what passes for a strategic plan is meaningless garbage. Or, being smart, you could decide to synthesize a corporate strategic plan on which to base your IT strategic plan.

Begin with goals. How do you get to understand the company's real goals and strategies? How do you determine the corresponding IT goals? Talk to the right people.

You and your "No. 2," or second in command, should meet with each of the senior executives who have profit-and-loss targets or who have to answer directly to the stockholders. Their titles include CEO, COO, CFO, VP of production, chief engineer and VP of sales. Ask them about their goals, strategies and tactics. Ask them how IT can support them.

You'll find that these senior executives love to talk about goals and strategies. After all, goals drive their day-to-day lives. They may be financial goals, production goals, quality goals, sales goals or customer-satisfaction goals, but you'll find they will be measurable, concrete and value-creating, with a one- to three-year realization horizon. They won't be fuzzy, emotional or politically correct. Their goals are the reality that drive the company and should drive you as the CIO. Their strategies will focus on deployment of their people and financial resources and on cooperation with other senior executives.

My experience has been that these leaders will also be open to discussing the role IT has played and can play in their areas of responsibility. You'll have to "drain the swamp" before you start getting constructive input on IT, but it's worth it.

Compile the results of all your interviews. Meet with your staffers. Review your work with them. Look for common elements across the goals you've heard. Start working out which IT strategies will be required to achieve the key executives' goals and support their strategies. Do your own priority stack of the goals and strategies based on your view of their relative impact on the company.

The senior executives will be strong on goals and strategies but weak on tactics. You'll have to drop down a level or two to get this input. Go visit some key middle managers. If you're in a manufacturing company, be sure to talk to some key shop foremen. Tell them what you're doing and ask for help. Show them the goals and strategies you've heard. Most likely, they will be able to tell you what tactics they're using to achieve them.

Put your findings and recommendations into a concise presentation outlining what you heard and what you're recommending that IT do. Include a description of the resources you will need to carry out your plan and the support you will need from the senior management team.

Then visit the CEO and go through your presentation. Don't share names, but do share what you heard and your conclusions. Ask if you've got them correctly prioritized.

Suggest to the CEO that you incorporate his reaction to your plan and then share it with the senior management team in an upcoming senior staff meeting. I'll bet he jumps on the suggestion.

Include your No. 2 in your presentation to the senior management team, and compare notes afterward.

Then meet with your direct reports and outline a presentation to be given to the entire IT organization. Plan for a lengthy Q&A session. After all, you're sharing some pretty interesting stuff with them, and they probably will have some really good input.

Keep the plan fresh. Meet periodically with the same senior managers and review how things are going. Listen hard for early signs of trouble. Review your metrics with them at a summary level so they know how you're performing against the plan you've agreed to execute. Review your plans and status with the CEO as well. Keep him informed about issues you're encountering.

PLANNING TRAPS

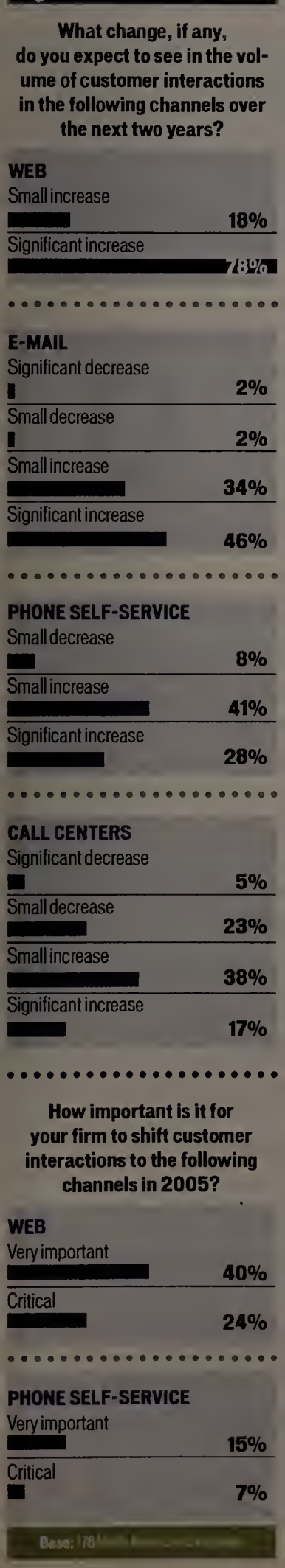
- **A common error is to mistake the company's mission statement as representative of its goals.** Most of these high-sounding statements are totally content-free and remarkably interchangeable among U.S. corporations. **Test the value of the mission statement.** Is it executable? Can you measure it? Does it improve shareholder or employee value? If not, stick it into your lower desk drawer and move on.
- **Another way to mess up is to turn the planning process over to staff groups and consultants.** My experience is that neither has a clue about the realities of the business. Staffies don't face production quotas or deployment deadlines, and consultants deal only with their own sales quotas, which are most often in direct conflict with your goals. This has to be *your* plan, and you have to be involved personally.

Remember, the secret to successful strategic business and IT planning is to follow the sequence of goals, strategies and tactics. If you get this right and take advantage of the steps I've outlined, you'll be one of those CIOs who beats the 18-month tenure average. And, you'll be cashing some big bonus checks as well. **52343**

Lewis, a CIO for 17 years, is the founder and senior partner of The Edge Consulting Group LLC in Atlanta. He can be reached at edgeconsulting@bellsouth.net.

QUICK HITS

What change, if any, do you expect to see in the volume of customer interactions in the following channels over the next two years?



How important is it for your firm to shift customer interactions to the following channels in 2005?

SOURCE FORRESTER RESEARCH INC., CAMBRIDGE, MASS., JANUARY 2005

BARBARA GOMOLSKI

Are You Really Customer-centric?

IT HAS BECOME FASHIONABLE — even essential — to be a "customer-centric" organization. As consumers, we're bombarded with messages from insurance companies, retail stores and health care providers telling us that we come first.

Of course, these are the same companies that make mistakes on our bills and won't let us talk to a live person on the phone. Saying your organization is customer-centric and then failing to deliver is worse than just providing bad service in the first place. Once you say you're customer-centric, customers reasonably think that they are the priority. So it's an even bigger blow when the organization fails them. If you claim the customer-centric label and deliver, however, you have probably got a customer for life.

BARBARA GOMOLSKI, a former *Computerworld* reporter, is a vice president at Gartner Inc., where she focuses on IT financial management. Contact her at **barbgomolski@yahoo.com.**

These days, the customer-centric label is being applied to more and more IT organizations. It seems that just about every CIO I talk to believes that he sits atop a customer-centric organization. But in reality, few IT organizations are truly customer-centric. Most are what I call customer-aware. That is, they have a pretty good idea of what their customers want, but they aren't prepared to deliver on those wishes.

Before you brand your IT organization as customer-centric, take a look at some attributes of customer-centric IT groups and make sure you and your shop are really prepared to live up to the high expectations you'll be setting.

■ **A customer-centric IT organization defines, markets and sells its services from the customers' point of view.** To be truly customer-centric, the IT group has to be known and valued by the rest of the organization. This means that IT can't be the modern-day equivalent of the "guys in the basement." IT services must be recognizable to clients, and IT must offer something that clients are willing to pay for.

If your company were about to outsource an IT service, such as desktop support, the prospective IT services provider would come in with a very clear description of what it does, the value it would bring to your organization and the costs. An internal IT group must do the same if it wishes to be seen as customer-centric.

■ **A customer-centric IT organization never says no.** I still meet many CIOs who believe it's their job to be the gatekeeper, hall monitor or equivalent person in their organizations. These well-meaning people actually tell their customers no all the time. No, you can't have that software. No, we can't meet that deadline. No, we can't provide that service. In the customer-centric IT organization, "no" is not in the vocabulary. Anything can be done — at a cost.

Customer-centric IT organizations control demand by using a financial model that helps customers balance the costs and benefits of their requests. In other words, instead of saying no, they let the customer decide whether a particular product or service passes the cost-benefit test.

■ **A customer-centric IT organization knows and understands its customers.** If an IT organization is isolated from, or unfamiliar with, its customers, it can't succeed. Too often, CIOs fail because they're bogged down in technology issues and don't see huge problems that exist in their service delivery and credibility.

At the top, the CIO needs to know the CEO and other top executives as peers. At the project level, relationship managers need to be able to work closely with line-of-business leaders. At the service-desk level, IT professionals need to be aware of the nature of the work performed by the company's end users.

■ **A customer-centric organization is market-driven.** In other words, the products and services offered by customer-centric IT organizations match the needs of the customers. An aggressive and entrepreneurial user base has a different IT wish list than do users in a mature industry who are looking to minimize cost. A customer-centric IT group matches its services to the needs of the organization in which it exists.

I don't mean to discourage organizations from pursuing a customer-centric focus. (I would caution against using the term *customer-intimate*, however. Most of us want a lot of things from IT, but intimacy isn't one of them.) If you decide to claim the customer-centric title, be prepared. Your customers will expect you to deliver. **52342**

WANT OUR OPINION?

For more columns and links to our archives, go to **www.computerworld.com/opinions**

Who was selected as best in BI?

Siebel Business Analytics
Best Business Intelligence Application
2004 RealWare® Award Winner

Siebel Business Analytics received the most prestigious BI award because unlike traditional BI vendors, Siebel meets the new business demands of enterprise BI. Siebel delivers richer, real-time intelligence for everyone across your enterprise. Working seamlessly with your existing systems and data warehouses, Siebel's mission-critical BI architecture supports multi-terabytes of data and thousands of users. And Siebel's pre-built solutions embed industry-specific best practices that are flexible, quickly implemented, and deliver low TCO.

To learn more, visit www.siebel.com/realware

SIEBEL.
Business Analytics

KNOWLEDGE CENTER
IT MANAGEMENT

02.21.05

The Vendor Management Office
These groups, like the one CIO Jim Lester set up at AFLAC, can be effective for centralizing procurement, monitoring relationships and cutting costs. Here's how companies are learning to get the most out of their vendors. Page 38

Tough Tactics
Expert Joe Auer offers tips for hardball negotiating with technology vendors. Page 40

OPINION
Going 'Glocal'
Managing IT vendors isn't something that stops at the corporate data center or even inside IT itself, says columnist Mark Hall. Page 43

EDITOR'S NOTE

ONCE, I WAS TRYING to interview a CIO in his office, but his phone kept ringing every few minutes with sales calls. He'd pick up the phone, bark some command like "Mail me some stuff" and slam down the phone to resume our interview. I've also heard tales of vendor reps roaming the halls — not only the halls of the IT shop, but of the executive suite, too, trying to bend the ear of the chief financial officer.

It's time to take control, or else the vendors will control you. This special report will give you ideas for being more assertive. You'll learn how to set up a vendor management office, negotiate contracts and screen those calls!

I know — the vendors want to be your "partner," as they say. CIOs fall into three camps on this notion: those who want vendors to be partners, those who see vendors as adversaries and those who take the middle ground. "I use the word *partner* very carefully," says Jean Holley, CIO at Tellabs. "Of all the companies we do business with, only a handful are partners that we share our strategy with."

My view is that in a capitalist society, buyers and sellers are supposed to have arm's-length transactions, not sweetheart deals. That doesn't mean people have to be nasty, only prudent. As IT negotiating expert Joe Auer says: "It's a fantasy that it's a partnership. Vendors use the term all the time, but about the only way it's really a partnership is that you divide things down the middle — they take all the money, you take all the risk." **52405**

Mitch Betts is Computerworld*'s executive editor. Contact him at mitch_betts@computerworld.com.*

KNOWLEDGE CENTERS ONLINE

More articles on vendor management are available online at the IT Management Knowledge Center:

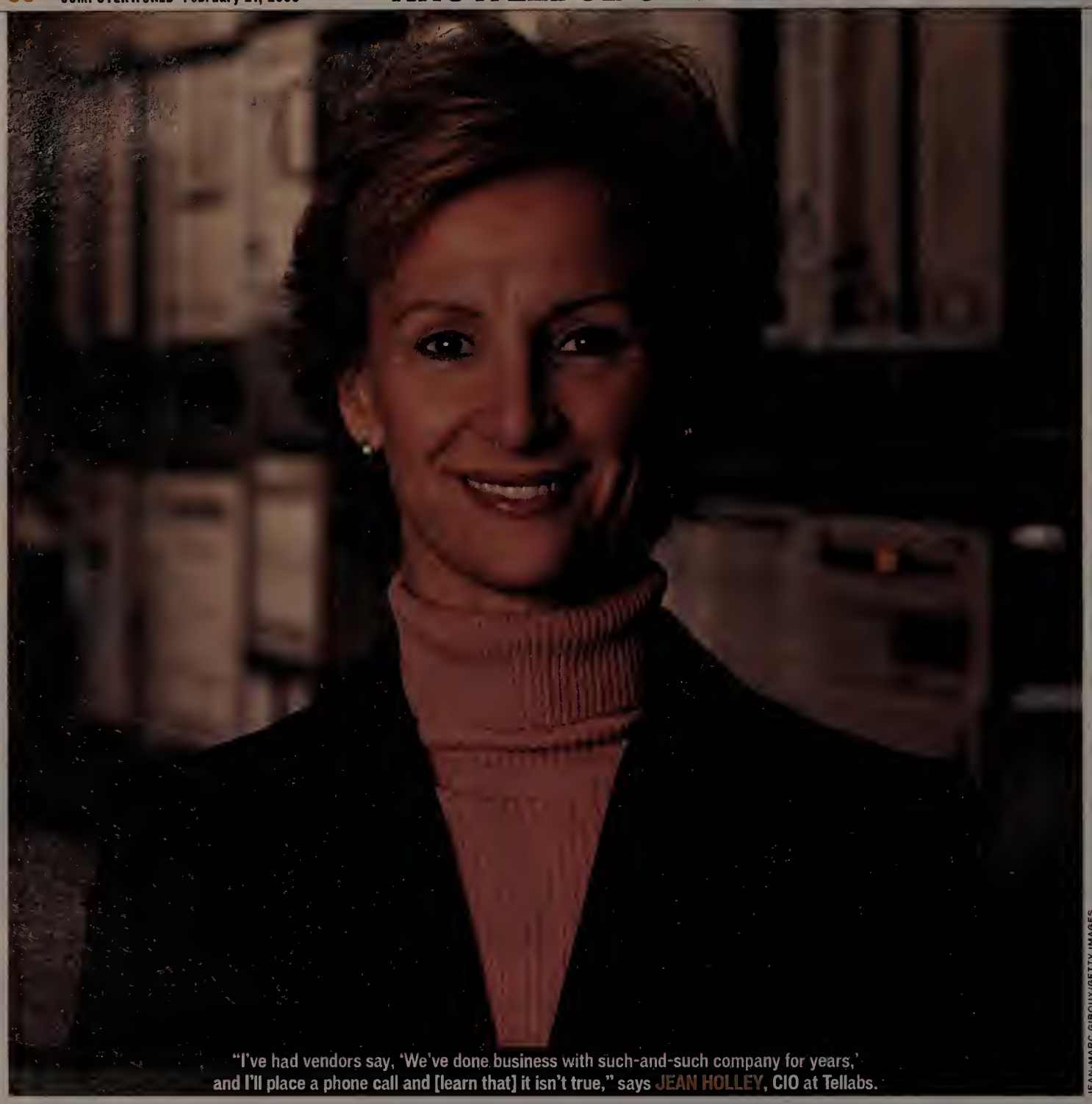
QuickLink k1900
www.computerworld.com

JONATHAN CARLSON

SPECIAL REPORT

Guide to Managing Vendors

Learn how to take control of the relationship.



JEAN-MARC GIBOUX/GETTY IMAGES

"I've had vendors say, 'We've done business with such-and-such company for years,' and I'll place a phone call and [learn that] it isn't true," says **JEAN HOLLEY**, CIO at Tellabs.

Getting to Know You

A healthy partnership with a technology vendor requires two-way information flow. By Mary Brandel

PICK UP NEARLY any piece of technology product literature today, and it will proclaim not only the vendor's desire to sell you a "solution" but also the vendor's desire to become your "partner." But for veteran technology buyers, there is a fine distinction between a partner and a vendor.

"I use the word *partner* very carefully," says Jean Holley, senior vice president and CIO at Tellabs Inc., a telecommunications equipment maker in Naperville, Ill. "Of all the companies we do business with, only a handful are partners that we share our strategy with."

Little wonder: In order to establish a true partnership with a technology vendor, you need to get to know each other — intimately. That means taking the time to pave a two-way street for information to flow freely in both directions. "A partnership is like a marriage, where it's only natural to know each other's dirty secrets," says Michael Mah, an analyst at Cutter Consortium in Arlington, Mass.

But some CIOs agree that rather than letting that depth of knowledge grow naturally over time, you need to ask lots of questions, ensure that you're getting honest answers and provide a high level of candor in return.

Skipping this due-diligence stage can bring about disastrous results, such as hiring a vendor that is all about the profit, says Jesus Arriaga, vice president and CIO at Keystone Automotive Industries Inc. in Pomona, Calif. "They know they can come in, charge you on an hourly basis, and if you're not careful, they're gone. You need to start an honest relationship from the beginning," he says.

Knowing what you're looking for is the first step. Here are 10 questions you should ask to determine whether you can trust a vendor as a partner.

1 Who are some of your customers? The point here isn't to check on official reference accounts, which are bound to be success stories, but to talk with customers who aren't prequalified. Holley gets account names from sales reps or someone even higher up a vendor's food chain. When she knows the CIO at the account, "I'll pick up the phone and ask what their experience has been," she says. This research yields hidden land mines, as well as out-and-out embellishments. "I've had vendors say, 'We've done business with such-and-such company for years,' and I'll place a phone call and [learn that] it isn't true," says Holley.

Even if you can't get the name of a nonreference account, try to get the vendor to divulge details on projects that went south. "We toss out negative questions to see what the response will be, like, 'What have you done when a customer had a downed system?' " says Arriaga. He also asks what happened, how the problem was resolved and how quickly it was resolved.

2 What is your previous experience in our industry? It's not always vital to choose a vendor with experience in your industry, but you want to know if it understands industry jargon, if it's just breaking into the market, if it can parlay experience from other industries and whether it's working with any of your competitors, says Holley.

In some cases, it might make sense to leverage the experience of a software vendor that provides applications to your competitors. But as Holley points out, if you want to differentiate yourself in a strategic area such as customer relationship management, the opposite would be true.

At St. Luke's Health System Inc. in Kansas City, Mo., CIO John Wade goes so far as to ask partners to not deal with companies in his region for a five-year period once he has divulged the health center's business plan. "It's human nature that if you're with one of our competitors and you're doing a planning engagement for them, you could blurt out, 'Well, St. Luke's is doing such and such,' " he says.

3 Can you provide data on recently completed projects? If you were building a house, you'd ask the contractor to tell you about previous projects. However, most technology providers don't keep this type of data at their fingertips, Mah says.

"When a vendor says it can do a job, there has to be a way to corroborate that it took this many people, it lasted this long, it cost this much, and here's how much functionality and reliability we delivered. You'd think that would be a reasonable set of questions," he says. If you can't get that information, there's no way to judge the legitimacy of the proposal, Mah says.

4 What is your fiscal calendar? Knowing the vendor's calendar can offer insight into what drives its pricing, sales compensation — and even its level of customer service.

"We get a lot more customer attention the month or two when Microsoft is doing its customer-satisfaction surveys," Holley says. "I now hold them to that performance throughout that year."

But having this information and using it to your advantage means weighing the lower price against the business benefit. "If I stall the vendor into the fourth quarter, maybe I'll get a few more dollars shaved off the sale price, but what is the cost to my business to delay that decision?" Wade points out.

5 Can our CFO meet your CFO? When it comes to a vendor's financial status, call in the experts, Arriaga advises. "Ask for their full financials and set up a meeting between the CFOs," he says.

Don't wait too long to do this financial check, Holley says. At Tellabs, the financials group checks the vendor's numbers at the same time that her group is establishing the contractual agreement. "You need to lean on other departments in the company," she says.

And remember — you're not looking for a company that will last forever. In reality, five years is enough, Wade says. "I can suffer not having the vendor around in the last year or so of the product cycle," he says.

6 How big is your workforce, and what portion is onshore vs. offshore? Clients need to know not only how many members of the project team are U.S.-based vs. foreign-based, but also how that affects components of the final price, Mah says. "You want to know the mix of people doing the engineering for you," he says. "If people are offshore, there's a higher risk of domain knowledge being absent." Mah refers to a health insurance company that decided not to go with a particular vendor because it was using a high ratio of offshore programmers, who might not understand the nuances of U.S. health insurance.

Another twist on this question is knowing what levels of staff are based in the U.S. vs. offshore. "If you heard the management people are all offshore but that they'll fly in once a month with a translator, that's probably not going to work," Wade says.

7 What's your corporate hierarchy? Knowing who reports to whom becomes important when you need to escalate a problem, Holley points out. It's also a useful perspective to have when you need to respond to calls from a variety of people in the organization, she says.

8 What if . . . ? There may be no better way to see a vendor's true colors than to ask questions to which you already know the answers.

"We like throwing out concepts and infrastructure ideas we have and hearing either validation or new solutions," Arriaga says. "We also play devil's advocate — even if we know something is not the right thing to do, we like to hear their response."

9 Who is our account manager? After a few instances of account managers changing midstream, Arriaga now asks the vendor to appoint an account manager at the onset of negotiations and guarantee that that individual will remain in that role.

To make sure it's a good fit, Arriaga drills the account manager about his skills and asks for customer references. "Once we find the right person, we're bulldogs about keeping him on the account," he says.

10 What is your business plan? An essential step is signing a nondisclosure agreement and viewing a five-year road map of the vendor's technology and strategic plan. This enables you to map the life cycle of what you're purchasing back to your business needs and IT strategy.

"Are you the first one to trial the product, or [are you] buying it at a fire-sale price?" Holley asks. "You should intentionally know that."

This is also the time to see if there's a healthy alignment between your two organizations. Does the vendor plan to continue focusing on your industry? Is it expanding into technology that will become important to you or your industry, such as electronic outpatient records in health care?

Wade says that one of his favorite tactics is to ask what the vendor sees on the horizon that will affect its business and what it plans to do about it. "You've got to be credible to stand up to this type of scrutiny," he says.

In one instance, Wade says, a major health care software vendor refused to share its business plan for fear the plans would change and thus be misleading. While there was pressure to simply trust the vendor based on its reputation, Wade decided to eliminate the vendor from the running. "You don't bankroll the shop on, 'Trust us,' " he says. **52015**

Brandel is a Computerworld *contributing writer in Grand Rapids, Mich. Contact her at mary.brandel@comcast.net.*

What to Divulge About Your Company

ONCE YOU'VE DECIDED that a technology vendor is worth getting close to, there isn't much that you should hold back on when it comes to sharing information about your company. "We need to be just as open as we expect them to be," says Keystone Automotive's CIO, Jesus Arriaga. The key is to have the vendor sign a nondisclosure agreement so you can share information freely.

St. Luke's CIO John Wade asks vendors to sign nondisclosure agreements while he's still at the narrowing-down stage. "If you can operate in a very open environment like that, you'll tend to make a better selection," he says.

Tellabs CIO Jean Holley says you need to share everything, from historical drivers and challenges you've had with technology adoption to the business goals for using their products or services, as well as corporate hierarchy and reporting relationships. Be clear about your own business cycle, so the vendor isn't pitching ideas that don't fit in with your calendar or strategies.

Be adamant about whatever business area the vendor is targeting, says Arriaga. For instance, when Keystone was choosing a customer-service outsourcing partner, "we were very upfront with what we were looking for and in some cases very stern about what our philosophy was," he says.

One of the few areas that you need to be at least a little cagey about is financial disclosures. Even if a nondisclosure agreement is signed, caution employees about speaking out of line. "We try to educate people as to who should be the mouthpiece [for news like acquisitions or revenue growth] and how far to take conversations," Holley says.

Mistakes happen. For example, an employee might comment on the difficulty of pushing through a requisition because the numbers aren't looking good. "You don't want someone commenting on that," Holley points out.

– Mary Brandel

RETHINKING VENDOR MANAGEMENT

OPINION: Columnist Thornton A. May offers a three-step approach to effective vendor management:

QuickLink 43991
www.computerworld.com

The Vendor Management Office

HOW TO CREATE IT

By Thomas Hoffman

TEN YEARS BEFORE Jim Lester became CIO at AFLAC, he worked for a vendor that sold property and casualty insurance software. In the worst client meeting he can recall, two managers nearly came to blows over whether their insurance company needed the software he was pitching.

"I kind of slipped out the door and took the quickest plane home," says Lester. But the encounter also helped convince him of the need to set up a vendor management office (VMO) when he became the CIO at Columbus, Ga.-based AFLAC Inc. in 2001.

Recalling the days when he worked for vendors, Lester says, "I've been treated like a king and as a peasant. So I wanted to create a climate where [vendors] felt comfortable discussing their product offerings and made sure we connected them with the right people."

AFLAC, short for the American Family Life Assurance Company of Columbus, is just one of a growing number of companies setting up VMOs to more effectively manage their vendor relationships. "It's becoming massive," says Howard Rubin, executive vice president at Meta Group Inc. He predicts that in 10 years, organizations will buy hardware and software capacity and functionality from a network of vendors. As a result, says Rubin, vendor management "will be the core of IT economics."

To launch a VMO, most organizations start by naming an IT manager who is an effective communicator and is well versed in managing relationships between vendors, business leaders and the IT department. These leaders then typically hand-pick a few savvy IT managers who either have experience dealing with certain types of vendors (for example, hardware, software or service providers) or are skilled in contract negotiations or overseeing service-level agreements.

Vendor managers then compile a list of the top vendors they work with to help manage those relationships and develop a standardized set of vendor performance metrics if they aren't already in place.

For the moment, organizations such as Southern Co. are leveraging their VMOs to get the most out of their vendor relationships.

"We do business with hundreds of vendors, and you can't have the same level of relationships with all of them," says Jim Trupiano, technology contracts manager at Southern, a superregional energy company in Atlanta.

Shortly after the utility established its VMO in mid-2004, it decided to identify the top 35 vendors it works with. It made the importance of products and the amount of dollars spent the top criteria, says Trupiano.

Now, Trupiano and his team of six vendor managers are in the midst of developing a scorecard aimed at tracking key performance indicators for vendors. These include tracking whether purchasing hardware warranties made financial sense based on the failure rates of equipment and the cost of sending the equipment back to the vendor versus fixing it in-house.

A former software salesman and now CIO at AFLAC, JIM LESTER has sat on both sides of the negotiating table. "I wanted to create a climate where [vendors] felt comfortable discussing their product offerings," he says.

STAN KAADY

FIRST STEPS

- When choosing someone to run the VMO, look for a proven leader who understands technology, business issues and vendor requirements.
- Don't be afraid to use consulting resources to get the VMO started.
- Establish criteria for identifying your top vendors.
- Put vendor scorecards in an existing system so that it's easy for IT managers to rate vendors.
- Give the VMO power. If the vendors know they're dealing with decision-makers, they'll pay attention. If they think they're dealing with low-level workers, the VMO will probably fail.

Bang for the Buck

Southern also plans to evaluate the levels of software maintenance agreements it has with vendors (such as gold, platinum and silver) and whether the company is getting its money's worth out of them. "If I paid a gold premium for 24/7 support and I only called the vendor five times, was that worth it over the course of the year?" asks Trupiano, who adds that his group plans to have its performance scorecards in use by this spring.

Metrics used to gauge vendor performance vary based on the types of products and services being provided, say VMO managers.

For instance, United Parcel Service Inc. tracks service-level agreements on its telecommunications contracts, says Gary Kallenbach, vice president of information services at the logistics company's Mahwah, N.J., data center.

For vendors that provide hardware support, UPS monitors how quickly they responded to a problem, like whether they met a two-hour response requirement on a service-level agreement. It also monitors the amount of time that application development

contractors spend each week on a project.

Some VMOs have vendor managers who specifically focus on hardware, software or services vendors — but that isn't always the case. "We sort of look at vendors in three categories: strategic, tactical and commodity vendors," with the last category referring to those that provide items such as printers, says Lester.

At The Guardian Life Insurance Company of America in New York, one vendor manager focuses on consulting vendors while another works on contracts, terms and conditions with all vendors. A third person focuses on sourcing and the request-for-proposal process, says Rick Omartian, the company's IT chief financial officer and chief of staff, who also runs the VMO.

Guardian Life launched its VMO in 2001, after Dennis Callahan arrived as CIO. At the time, the company was working with more than 200 consultants, with "few if any standard contracts in place," says Omartian.

Now, Guardian's senior IT executives and executives from its top 25 vendor partners meet monthly to discuss how well the vendors are meeting key performance criteria in their contracts, such as the number of defects, delivery times and utilization rates, on a scale of 1 to 10.

"Then we review the scorecard with the vendor and discuss where they can improve with us and look for feedback from them on how we can improve the relationship," says Omartian.

Many organizations with VMOs have been able to generate impressive cost savings after standardizing their IT procurement efforts and leveraging relationships with their biggest vendors across multiple geographic areas or business divisions.

For instance, AFLAC realized seven-figure savings in each of the first three years after its VMO was launched, says Lester.

But Lester and other IT leaders say it's sometimes a struggle to get both vendors and business-unit leaders to consistently secure IT contracts through the VMO.

"Vendors adapt, and some of them would rather not deal with IT or the VMO and try to go directly to the customers," says Lester. "It's just a tough nut to crack." **52017**

HOW TO STAFF IT

By Stacy Collett

WANTED: Vendor Management Superstar.

A technology guru with thorough knowledge of hardware, software and systems, plus awareness of business unit needs. Must be a creative negotiator with stellar communication skills and experience in finance, contract law and relationship management. Ideal candidate is willing to confront vendors, call their bluffs, shake trees and keep vendors honest. Ability to create win-win solutions a must.

Sound like a tall order? An IT worker with these skills would slam-dunk an interview for a vendor management position.

SKILLS

Managing vendor relationships is no longer as easy as appointing a technology employee to be the company's official representative. Outsourcing, the trend toward longer and more complex deals, and an increase in the number of vendors of all sizes have prompted companies to rethink the skills and experience required to manage these contracts on a daily basis. For many companies, the technology and business units must join forces.

"We started to realize that the IT organization is only as good as the vendors," says Guy Russo, senior vice president of finance and information services at CommunityAmerica Credit Union. "It's a catch-22. If a vendor is not meeting its SLA, it's very difficult for the IT organization to commit to its SLAs." Two years ago, the Lenexa, Kan.-based company began moving contract responsibility from its business units to the IT department after the technology staff learned that contracts were being signed by people with no understanding of the technology commitments they were making.

Three IT directors suddenly found themselves managing dozens of vendor contracts. Russo's team quickly realized that the only way to cover all its bases was to pair IT with business unit reps on each vendor engagement. "It's a team-oriented approach. The IT side will look under the hood," while the business side focuses on meeting its needs, Russo says.

Beyond skills, vendor managers need to develop a flare for relationship-building, says Chris Ambrose, an analyst at Gartner Inc. "It's a combination of skills, knowledge and learning that individuals have to develop over time."

"The people who understand the art of negotiation are hard to find — especially within IT," says Ron Strout, senior vice president of strategy and governance at State Street Corp. in Boston. "IT people tend to think a little bit in black and white. What's more, there are two sides to IT. You get the group that doesn't trust any vendor and the group that falls in love with the vendor, and they almost get religion."

Strout's four-person team manages interactions with Oracle Corp. and several offshore vendors. Though the homegrown team has an IT background, other skills are equally important. "You have to understand when to be tough with the vendor and when to give the vendor a break," Strout says. "When you're managing strategic vendors, you can't just be negotiating with them all the time. You also have to understand when it's time to collaborate, be partners and do them a favor."

Develop Talent In-house

While there's no one-size-fits-all solution to vendor management, there are several ways to fill the skills gap.

Ambrose suggests developing the skills internally. "They need to look beyond the IT organization — reach back into the biz organizations and pull people with a business background and get them the technology understanding that they need," he says. "But it's not going to happen overnight."

Vendor managers also sharpen skills by attending research-firm conferences and seminars, along with vendors' user-group meetings, says Strout. "It's very important to get into the mix with some other companies that are doing vendor management on a similar scale to what we have," he says.

Search Outside the Firm

Sometimes the combination of skills needed to manage vendors requires an outside search. "If one of the people on my team were to leave, I would look outside the company," says Tom Ciardiello, director of strategic sourcing at Chicago Mercantile Exchange Inc. "I want to make sure they have the fundamentals of procurement. They need to understand how the process works, what we as a company look for and what the vendor would look for. If they have worked for one of these vendors, that's always a huge plus."

In the short term, some companies look to a service provider for vendor management expertise. "Bring in somebody who has been on the other side of the equation, who understands these issues," Ambrose says. "They can help build the organization's relationship management, performance management and contract management skills and abilities."

With the raw talent in place, Strout advises companies to give vendor managers room to grow. "Give them some slack. Let them get their own wins," he says. "The vendor has to know that the person they're dealing with has some authority or empowerment. Otherwise, they give a nod and a wink and go up to the next level. Let [the vendor manager] know they have the backing of your management team." **52016**

Collett is a Computerworld contributing writer in Chicago. Contact her at stcollett@aol.com.

Separate the Skills

TWO YEARS AGO, Arrow Electronics Inc. revamped its entire vendor management practice as a new CIO took charge and challenged the Melville, N.Y.-based company to become a more services-oriented organization.

With a growing and increasingly diverse vendor portfolio and a new emphasis on outsourcing, Arrow created a vendor management office to manage its 10 premier, 20 preferred and 150 standard vendors. But staffing the office required a complex blend of skills.

"We took the contractual piece and the negotiations out of the functional areas and moved them to the VMO," explains Ash Brooks, vice president of both IT infrastructure and operations and the vendor management office. That requires a background in finance, contract law and, last, technology. "But the technology people – they're the ones who you want to maintain the relationship," says Brooks. "It's a good idea to have the VMO office disconnected from that because they can lean on the vendor from a contractual standpoint, but you maintain a good working relationship with your functional departments. It allows you to save face and have a good working relationship with the vendor."

– Stacy Collett

Tough Tactics

Joe Auer gives the straight scoop on hardball negotiating.

FEW READERS require an introduction to **JOE AUER**. He has been offering procurement and negotiation advice for nearly 30 years, through his consultancy — Winter Park, Fla.-based International Computer Negotiations Inc. — and, for several years, in an award-winning *Computerworld* column. *Computerworld* contributing writer Steve Ulfelder recently sat down with Auer to discuss hardball negotiating.

Is it a good idea to play hardball with vendors? Don't you risk alienating a long-term partner? First, it's a fantasy that it's a partnership. Vendors use the term all the time, but about the only way it's really a partnership is that you divide things down the middle — they take all the money, you take all the risk.

Having said that, sure, at some point the adversarial relationship does need to translate into an ongoing business relationship. That's largely a matter of style and approach. Suppliers respect companies that negotiate with them aggressively and correctly. Many years ago, when I was on the vendor side, if somebody just accepted our deal and paid our price, we left the room and said, "Can you believe how much those jerks left on the table?"

You can't love suppliers into a good deal; you've got to leverage them. Look at it this way: If you don't negotiate aggressively, you won't protect your company and you'll make a lousy deal.

Should IT managers play vendors off each other? Of course. Probably the biggest problem I see [with clients] is that people select a vendor before they negotiate. Not only that, they tell [the vendor] they've been selected, and the project time frame and the competitive pressures they're facing, etc. They become more and more dependent on the vendor. Then, when they've got no more options, they say, "OK, let's negotiate." What is the supplier's motivation to negotiate then? They know you're committed. They know your timetable. They don't have to meet your needs. They just need to dance around while the clock runs. We advise clients to narrow it down to at least two vendors, possibly three, and fully negotiate terms with them all.

In fact, sophisticated companies have their own contracts, written from the user's point of view. You put that contract right in your [request for proposal] and say to vendors, "We want you to accept these provisions or tell us in writing what you can't accept." This is effective because it's early in the process, when there's a lot of pressure to win your business. The suppliers are worried that their competition is meeting your demands.

Don't vendors need a certain amount of information to meet the buyer's needs? Yes. The problem is that if you give out all this information before you've picked a supplier, your leverage is gone. In negotiation, information is power — and generally, purchasers give the vendor way too much information.

In fact, it's a good idea to demand information of your own right at the outset. Many IT managers don't know it, but the sales rep you meet with early in the cycle probably lacks the authority to make a lot of concessions. So I may say to a vendor, "I need a detailed org chart right from you, up to the person who's going to sign the contract — names, titles, contact info." You need to get up to the top guys for the best deals — that's just a fact.

In addition to the bottom line, what parts of vendor contracts should people address when they're playing hardball? There are some clauses you just strike right out. Every vendor contract has a "disclaimer of fitness for purpose" provision that says the product won't necessarily do what they're selling it to you for. Ridiculous.

Also, when the sales rep tells you, "We're going to give you the best deal we've ever given anybody," you should say, "Fine, let's put that in writing." Insert a "favored customer" provision that guarantees this is the lowest price and that if you ever learn of someone else getting a better deal, you are entitled to that deal retroactively.

Other tips? Get formal training in procurement and negotiation. The vendors' people get, what, 10 to 20 times as much training as the buyers?

In general, keep in mind that there are a tremendous number of concessions not given simply because they're not asked for. Many people will do a deal with a vendor without ever hearing "No," without an impasse, without a deadlock. If that's the case, you just overpaid. **51968**

Ulfelder is a Computerworld *contributing writer in Southboro, Mass. Contact him at sulfelder@charter.net.*

DRIVING THE DEAL

Read vendor management expert Joe Auer's full collection of *Computerworld* columns:

QuickLink a5340
www.computerworld.com

FROM SALESMAN TO CIO

MICHAEL TAYLOR IS CIO AT TODD PACIFIC SHIPYARDS CORP. IN SEATTLE – but that's not why I called him. Once upon a time, Taylor was a sales rep for Unisys Corp., back when the company was going up against IBM for enterprise hardware and software business.

Given the challenges of competing with IBM during its heyday, it's no surprise that now, on the other side of the table, Taylor says he's "known as a pretty good negotiator." I asked him what IT purchasers don't know about vendors that might help them play a little hardball.

MICHAEL TAYLOR

■ **Be realistic.** Vendors are willing to move – a lot, in some cases – but nothing derails negotiations like a buyer who demands that the supplier give away the store. "The IT person needs to know the vendor's got to make money," Taylor says, quickly adding, "but not too much."

■ **Control the purse strings (or make them think you do).** "Vendors are always looking for who's got the purchasing power," Taylor says. So imply that you do. Don't give them a full rundown on all the signatures needed to green-light a purchase; they'll just use the information to end-run around you.

■ **Stay mum on other projects.** Another key data point for vendors is the number of [illegible] projects in your company, according to Taylor. The more projects, the less likely vendors are to go all-out on your deal – they're worried you'll lack the budget to finalize the sale, so why knock themselves out on your account? During the early, getting-to-know-you phase of negotiation, make it appear that your purchase is the company's primary IT initiative.

■ **Leave the door open.** "You always should have a second or third bidder out there" for major business, Taylor says. As an example, he mentions that Todd Pacific is presently sourcing a $250,000 to $500,000 storage area network. One provider has worked Taylor's team, while the other has made a poor impression. (Taylor declined to [illegible] vendors [illegible]) "We're [illegible]," he says. "But we're going to keep [illegible] group around just to [illegible]."

– Steve Ulfelder

IBM

IT'S STORAGE. IT'S FLEXIBLE. IT'S YOU.

Yes, you. Whatever is unique to you – x-rays, blueprints, customer information – storing vast amounts of data is important. Even more important is access to that information. Having data right at your fingertips. Welcome to the on demand world enabled by IBM TotalStorage® systems. Where your servers and storage work together to better manage data across your organization, giving you a range of entry-level to enterprise storage options. Thus, a total recognition of TCO, scalability and flexibility. IBM TotalStorage is for you. Find and learn the whole story at **ibm.com**/totalstorage/total

IBM TotalStorage®

IBM and TotalStorage are trademarks or registered trademarks of International Business Machines Corporation in the United States and/or other countries. Other company, product and service names may be trademarks or service marks of others. ©2005 IBM Corporation. All rights reserved.

JONATHAN CARLSON

Cold-Call Cascade

Tips for dodging some of those pesky technology pitches. By Steve Ulfelder

"I **ALMOST NEVER** pick up the phone unless I recognize the caller" via Caller ID, says Liz Parker, CIO at Thoits Insurance Service Inc. Lately, however, she has found herself stuck on the line with more vendor sales reps, and Parker thinks she knows why. Her voicemail message lets callers transfer to the receptionist at the Mountain View, Calif.-based insurer. Industrious sales reps have figured out that if they do this and then ask to be transferred back to Parker, they'll show up on Caller ID as an internal call and she will pick up.

"They're very creative," Parker sighs, with grudging admiration.

The deluge of vendor pitches shows no signs of slowing. And because of tight regulations surrounding faxes and e-mail, the telephone is the salesperson's weapon of choice. So we thought this was a good time to ask some IT managers who make technology purchase decisions what new tactics vendors are using to get their attention.

Unintended Consequences

Nobody ever warned IT managers that the Controlling the Assault of Non-Solicited Pornography and Marketing Act (CAN-SPAM), which has been in effect for more than a year, would increase their ration of cold calls. But it did. Unsolicited faxes have been outlawed since 1991, and when CAN-SPAM put a similar choke on unsolicited e-mail pitches, sales representatives from the estimated 255,000 technology vendors in North America started smiling and dialing.

It's an understatement to say that many of those dialers are ineffective. "Most salespeople [in the industry] today have no idea how to sell IT," says Paul R. DiModica, president of DigitalHatch Inc. in Peachtree City, Ga., one of the country's largest IT sales training companies.

"Most people who came into IT sales in the last 10 years grew up in an inbound market," DiModica says, referring to a market in which customers with fat budgets called vendors. "The greatest inbound IT buying ever" happened between 1995 and 2000, he says.

Needless to say, everything changed when the year 2000 rollover was successfully addressed. The stock market, led by the dot-coms, crumbled, and IT budgets shrank dramatically. "In today's outbound market, [salespeople] need to create value" in a phone call, DiModica says. DigitalHatch teaches salespeople to make a compelling case in their first sentence.

Sadly, it appears that not enough reps take such courses. IT managers say the majority of the cold calls that slip through to them are what Michael Taylor, CIO at Todd Pacific Shipyards Corp. in Seattle, calls "robo-calls."

The calls can even turn downright abusive. "We bought a couple of domain names and started getting calls from salespeople wanting to set up our Web site," recalls Mike Murphy, an IT manager at Kiferbaum Construction Corp. Murphy patiently explained to the salespeople that Kiferbaum, a company in Deerfield, Ill., with revenue of about $100 million a year, already had a Web site and was happy with it.

"One woman kept me on the phone 35 minutes," Murphy recalls. Initially polite, the rep got nasty as it became clear she wouldn't win his business. "She said, 'I'm looking at your Web site right now, and it looks terrible.' " Before hanging up, she told Murphy that with a site like that, Kiferbaum was bound to go out of business soon.

Among the IT managers interviewed for this story, there is a grin-and-bear-it attitude toward cold calls. The consensus opinion is that handling somewhere between five and 20 unsolicited calls per day is part of the job — and thank goodness for Caller ID and the delete button on voice mail. **52014**

Ulfelder is a Computerworld *contributing writer in Southboro, Mass. Contact him at sulfelder@charter.net.*

TIPS FROM YOUR PEERS

Want to know how other IT managers deal with the relentless vendor calls and e-mails? Visit our Web site and check out this collection:
QuickLink 52418
www.computerworld.com

SAVING TIME

These tips for managing cold calls could save you 10 or 15 minutes a day – golden minutes indeed.

■ **FROM V TO SHINING E.** Liz Parker, Thoits Insurance's CIO, gives out her e-mail address in her voice-mail message and makes it clear that it is the best way to reach her. That funnels unwieldy, time-consuming voice mails into a more manageable medium – and Parker even saves some of those e-mail pitches if she thinks they may prove useful later.

■ **GUARD DUTY.** Not everyone can pull it off, of course, but if you have an assistant or receptionist who can filter your calls, you're way ahead of the game. This gatekeeper can send the duds packing and let you know which calls have potential. Excellent sales reps expect this treatment, says Paul DiModica, president of DigitalHatch. "We train salespeople to talk to the gatekeeper as if they were the manager," he says.

■ **QUIZ SHOW.** Some embattled CIOs who don't have personal assistants hire an answering service and make sure all vendor calls are round [illegible]. The service is trained to grill callers about their companies, [illegible] cold calling. [illegible] down and [illegible] CIO [illegible]

– Steve Ulfelder

Go 'Glocal'

OLD HABITS DIE HARD, often for good reason. For years, I've been doing business at the local bicycle shop, even though two newer and bigger stores have opened downtown with better selection, lower prices and competent mechanics. My local guy knows me, my bikes and my riding habits. So, while I pay more and occasionally have to wait longer for service, I think it's worth it.

That's probably the attitude that IT staffers running operations outside of headquarters have about vendors. They know and trust their local resellers and consultants. When these vendors show up at the door, they're familiar with the infrastructure, the applications and the staff. They know the quirks and the work-arounds sprinkled throughout the IT operations and can avoid the problems these idiosyncrasies would cause for the uninitiated.

MARK HALL is a *Computerworld* editor at large. Contact him at **mark_hall@computerworld.com.**

But if you run IT for a global company, letting every local shop buy whatever it wants from whomever it wants can be expensive, put your security at risk, create compatibility problems and undermine your company's competitiveness. Corporate IT standards, when properly enforced, aren't just a way for headquarters to flex its bureaucratic muscle; they add value to the company.

The key phrase in that last sentence, of course, is "when properly enforced." That's the tough part.

Kevin Roden, CIO at Iron Mountain in Boston, says his company, which has operations in the U.S., Canada, South America and Europe, strives for a balance between endemic IT needs and a broader corporate strategy.

For example, Iron Mountain establishes "certification standards" for technology and then lets the local IT folks choose suppliers that they're comfortable with, as long as they meet those standards. According to Roden, it's important "to give local staff autonomy, but not such that they diverge so much we couldn't pull it all together."

Christopher Lochhead, chief marketing officer at Mercury Interactive in Mountain View, Calif., calls Iron Mountain's approach "going glocal," combining the best of both IT worlds. But he warns that CIOs like Roden not only have to oversee vendor management for a distributed IT organization, they also need to keep tabs on their worldwide line-of-business (LOB) managers. These heads of various business units are likely to pay lip service to global standards in meetings, then skulk off afterward and get what they want from whomever they want out of their own budgets. Those of you who suddenly found yourselves inundated with rogue Wi-Fi access points know what Lochhead is talking about.

Lochhead quips that LOB executives can be "firefighters by day and arsonists by night" when it comes to supporting IT standards. Once local LOBs step outside IT's worldwide standards and procurement process, trouble from security issues to compatibility problems is inevitable.

Prohibiting LOBs access to vendors is difficult and probably a waste of time. Both Roden and Lochhead suggest sitting down with these managers who lust for everything from wireless connections to the latest gadgets. Explain to them that denying every salesperson in one region technical support for, say, nifty Treo handhelds isn't an arbitrary exercise in power, but a rational application of business processes that make the company more effective, competitive and profitable.

Show them your portfolio management situation. That is, open the books about what you're doing for whom and why. Get them to understand why no is the right answer to their requests. If their arguments are sound and their requests valid, use them to help you make trade-offs in your portfolio by negotiating with other IT constituents to give up or delay their pet projects for something that makes more sense for the company as whole.

Also, make certain that LOBs grasp that although you're saying no, you're still aware that they might run off and spend their money wherever they want anyway. So, while you may refuse to back their technology investments with help desk or integration support, you can offer them advice on security and other matters to ensure that company assets aren't put at risk.

Your vendor management strategy needs to run on two wheels — one for IT inside and outside headquarters and another for LOBs. That approach will lead to a smoother ride. **51970**

IT'S EXPANDABLE.
IT'S AFFORDABLE.
IT'S YOU.

The IBM TotalStorage® DS4000 series lets you grow as your business does. Move from an entry-level single controller system to a high performance dual controller system with more storage capacity (from 36 gigabytes to 56 terabytes),[1] more memory and more robust functionality. And as you grow and you need to add more storage systems, you can manage them all from a single storage management interface. Helping to lower TCO. Prices for the single controller start at $6,599.[2]

Learn the whole story at **ibm.com**/totalstorage/expandable

IBM TotalStorage®

IBM

[1]Single controller system capacity is from 36 gigabytes to 3 terabytes. Dual controller system capacity is from 36 gigabytes to 56 terabytes. Usable capacity may be less. [2]U.S. list price for IBM TotalStorage DS4100 single controller system with 3 x 250GB SATA hard disk drives, current as of 2/4/05 and subject to change without notice. Actual customer prices may vary. IBM and TotalStorage are trademarks or registered trademarks of International Business Machines Corporation in the United States and or other countries. Other company, product and service names may be trademarks or service marks of others. ©2005 IBM Corporation. All rights reserved.

3rd Annual
COMPUTERWORLD

MOBILE & WIRELESS WORLD

Learn Proven, Top-Down Strategies to Achieve Enterprise Mobile and Wireless Success

Featured speakers include:

ANDRES CARVALLO
CIO
Austin Energy

PHIROZ DARUKHANAVALA
CTO
British Petroleum

RON FIJALKOWSKI
CIO
Strategic Distribution Incorporated

ERNEST PARK
CIO
Maytag

DALE FRANTZ
CIO
Auto Warehousing

KATHLEEN BANASHAK
VP, Customer Service Operations
Pitney Bowes

The Leading Conference for:

- IT Management
- Mobile/Wireless Technology Architects and Implementers
- Mobile-intensive Application Implementers
- Wireless LAN/Wi-Fi/Network Professionals

Topic Areas Include:

- Top-down Planning for Enterprise Wireless Infrastructures
- Building and Defending the Business Case
- Adapting Desktop Applications to Handhelds
- Using Broadband Wireless ISPs
- RFID
- Cellular Mobile Data and Carrier Management
- WLANs and Security

To register or for more information, visit **www.mwwusa.com/cw**

Got an award-worthy mobile and wireless project?

Submit it for consideration by May 2nd!

COMPUTERWORLD MOBILE & WIRELESS WORLD
Best Practices IN MOBILE & WIRELESS
AWARDS PROGRAM

www.mwwusa.com/cw

Attendees of Mobile & Wireless World 2004 saw solutions from:

PLATINUM SPONSORS: Cisco Systems, hp invent, intel, NOKIA Connecting People

GOLD SPONSORS: iAnywhere, Qualcomm, SENFORCE, SYBASE The Enterprise. Unwired.

PARTICIPATING PARTNERS: Credant Technologies, Intellisync, Mobile Automation, Next Level Solutions, PanGo Networks, SHARP, Targus, ViewSonic

Official 2005 Briefcase Sponsor

TARGUS
Making Your Mobile Life Easier®

The first 300 IT end-user registrants who attend will receive a Targus bag!

2005 Media Sponsors

COMPUTERWORLD
InfoWorld
Mobile Business Advisor Magazine
Mobile Enterprise
mobile ENTERPRISE ALLIANCE
NPA Network Professional Association

For sponsorship opportunities, call John Amato at 1-508-820-8279

SOFTWARE ENGINEERS (8 Positions) to provide on-site consulting in design, analysis and development of software for legacy systems in Oracle/IBM mainframe environment; development and administration in Oracle, DB2, SQL Server, e-commerce, ERP (PeopleSoft, Oracle, SAP) applications and web systems development in Java and Microsoft related technologies. Require: B.S. or equivalent in Engineering, Computer Science, Mathematics, Science or closely related field with two years experience providing skills in described duties. 40% travel to client sites within the United States required. Competitive salary and benefits. Apply with resume to: Human Resources, S4 Consultants, Inc., 1005 Montclaire Drive, Cumming, GA 30041.

Programmer/Analyst needed for Software Development, Services & BPO firm located in Burlington, VT. Job duties include: Analyze, design, code, develop and implement computer applications for clients located throughout the U.S. Engage in multi-dimensional and relational modeling. Use Oracle, SQL Server, Erwin, and SQL Server DTS. Perform work as part of a team. Applicant must have B.S. degree in Computer Science, Business, Math or Engineering. Applicant must also have 1 yr. exp. in the job duties described above or in any computer related occupation which must include skills listed above. 40hrs/wk, 8:00am–5:00pm, Mon-Fri, $60,008/yr. Send resumes to: Job No. 31155, P.O. Box 488, Montpelier, VT 05601-0488.

Comp:S/w Developer(NewYork) Multiple posi'ns:Desgn & devlp Oracle databases for Sun Solaris. Create, dev., maintain and modify HR Recruitment Automation database apli'ns for web, using SQL, PL/SQL and Java, working individually or coordtng database dvlpmnt as a team. Analyze user req's & bus.processes to automate or improve existing sys. and review comp sys. capabilities. Analyze & refactor existing appli'ns to identify & eliminate possible security vulnerabilities and performance bottlenecks. BS in Com sci or applied math or Infor. Tech or Electronic Engg w/4yrs exp. 40hrs 9a-5p. Reply w/2 res to: WebRecruiter LLC, 20 Exchange Place, Ste #4600, NY NY 10005

Seeking qualified applicants for the following positions in Memphis/Collierville, TN: Senior Programmer Analyst. Formulate/define functional requirements and documentation based on accepted user criteria. Requirements: Bachelor's degree* or equivalent in computer science, MIS, engineering, mathematics, business information systems or related field plus 5 years of experience in systems/applications development. Experience with Oracle query performance tuning, Abitinio ETL Tool and Unix Shell Scripting also required. *Master's degree in appropriate field will offset 2 years of general experience. Submit resumes to Joy Stubbs, FedEx Corporate Services, 60 FedEx Parkway, 2nd Floor Horizontal, Collierville, TN 38017. EOE M/F/D/V.

SOFTWARE ENGINEERS (2 Positions) to analyze, design, develop, implement, product support and maintain Enterprise Integration code and software applications for financial, supply chain/service industry using Java, Oracle/DB2, WebMethods Integration Server, WebMethods Broker and Trading Networks on operating systems Windows NT/2000, Sun Solaris and UNIX. Require: M.S. (Or equivalent) in Computer Science and two years experience in the job offered or as Integration Developer. 40% travel to client sites within the United States required. Competitive salary and benefits, 40 hours/week, 8 am to 5 pm, M-F. Mail resume to: Vice President, Frontline Consulting Services, Inc., 8701 Mallard Creek Road, Charlotte, NC 28262.

SYSTEMS PROJECT ANALYST. 40 hrs per wk. Mon-Fri, 8 am-5pm. Masters degree plus 1 year experience or Bachelors degree plus 2 years of experience or equivalent experience can substitute for college education. Experience requiring knowledge of network administration, client server environments, PowerBuilder, S-designer, DB-2. Knowledge of computer database modeling and systems analysis design and computer operating systems. **Resumes only to: Robbie Stroud, Florida Department of Financial Services, 200 East Gaines Street, Suite 112-C, Tallahassee, FL 32399-0314. Resumes must be received by March 4, 2005. **Preference shall be given to veterans & spouses of veterans as provided by Chapter 295, FL Statutes. EEO/AA Employer.**

IT Careers editorials cover relevant topics in the following industries:

Healthcare
Security & Defense
Finance
Biotech/Pharmaceutical
Insurance
Diversity
Consulting
Telecom/Wireless
Manufacturing
And many more....

Our readers include the qualified IT professionals that your company is looking for.

For more information, contact us at: 800-762-2977

IT|careers

Web Developer

Design, develop & maintain web-based image retrieval & archival application capable of full-text search, auto query, annotation, reporting & workflow using various programming & arch. methods. BS in CIS w/ability to do: web-based workflow diagram design, coordinate & orientation control using VML, Javascript, XML, XSLT, ASP, CSS; 2D/3D chart & graph report generation using VML, XML, XSLT, ASP, CSS; two-way web textual messaging using XMLHTTP protocol support, XSLT, DHTML, Javascript, CSS; image authoring, retouching, transparency, layer & animation control using GIMP; data access, mapping & exchange between MSDE & MySQL using ADO, SQL, ASP; Web based annotation w/attachment using FileSystemObject, ADO stream, & HTTP buffer handling; HTTP elements handling using Dictionary scripting & client-side array; SQL Server DTS design & implementation; XML content design, modeling, processing, rendering, & optimization; source control, bug tracking & reporting using Visual SourceSafe, TestTrack Pro. Certificates: IBM Cert. Sol. Dev. - XML, & W3Schools Cert. 40 hr/wk. 9 – 5. Resume to: Mr. Mario Chang, Executive VP, CFO, Virtual Image Technology, Inc., 11632 Harrisburg Road, Fort Mill, SC 29715

Amkor Technology is currently looking for a Senior Analyst for our Chandler, AZoffice. The primary function of this position is to perform project management and web architecture design utilizing tools such as Java, JSP, ASP, Websphere, HTML, Java Script, Dreamweaver, Oracle etc; analyze document reqs and recommend software solutions; analyze appl architecture, design appls by creating prototype solutions and study feasibility; create software development plans, implement strategies to improve business processes. Provide comprehensive support for product lifecycle business processes, platform, and integration reqs utilizing various PLM tolls including Agile & SCMnet. Require a Bachelor's degree or foreign equivalent in CS/Business/Engineering and 2 yrs exp in web technology. In lieu of a Bachelors, 3 yrs of academic studies in one of stated fields plus 1 extra yr of work exp in web technology will be accepted. Competitive salary, f/t. Send resumes to HR, Amkor Technology, 1900 South Price Road, Chandler, AZ85248. Refer Job Id AKT1104

Software Professionals in programming/analysis, systems analysis, QA engineering & testing, software engineering, systems administration, and related fields at all levels, including project lead and manager, with relevant bachelor's degree/equivalent. Also seeking Business Development Managers, Business Developers, Business Analysts, Market Research Analysts, Sales Engineers, Technical Resource Management professionals (several levels, Associates/ Sr.Executives/Manager)/Senior level positions require graduate degree/equivalent. May be relocated for short and long term assignments throughout the U.S.A. Zensar Technologies, Inc., One North LaSalle, Suite 3650, Chicago, IL 60602. Send resume & cover letter detailing position sought & relevant experience to balu@usa.zensar.com. Please quote reference CW/02/05 Zensar in all your mails.

SYSTEMS PROJECT ANALYST. 40 hrs per wk. Mon-Fri, 8 am-5pm. Masters degree plus 1 year experience or Bachelors degree plus 2 years of experience or equivalent experience can substitute for college education. Experience requirements can include knowledge of accounting and/or the principles, practices and techniques of computer programming and systems analysis design; computer flowcharting techniques; computer operation procedures and systems; computer programming language; ability to design systems logic and/or process information logically; analyze and interpret computer program data; identify and define user task needs and/or conduct short range and long range planning studies; prepare program specifications; perform mathematical calculations; plan, organize and coordinate work assignments; communicate technician data processing information effectively; establish and maintain effective working relationships with others. Responsibilities include ability to write and maintain application development programming code in accordance with all stated specifications. Assist in the development of project documentation, and maintain effective lines of communication with users, peers, and management regarding the status of the project. Provide support of system software through diagnosis of problems and implementation of changes to resolve problems and maintain software. Assist in the configuration management of developed software to maintain software integrity and version control of development software. Develop program specifications from functional specifications and assist in planning the allocation of system resources in the timely completion of software development projects. Develop and present test criteria, test new and modified programs and systems to ensure that planned results are obtained. **Resumes only to: Robbie Stroud, Florida Department of Financial Services, 200 East Gaines Street, Suite 112-C, Tallahassee, FL 32399-0314. Resumes must be received by March 4, 2005. **Preference shall be given to veterans & spouses of veterans as provided by Chapter 295, FL Statutes. EEO/AA Employer.**

Alcorn State University seeks a qualified Chief Programmer. Must have a Master's degree or equivalent in Computer Science, Computer Engineering, Engineering, or related field plus 3 years of experience in the position offered or 3 years experience developing applications. In lieu of a Master's degree as described and 3 years of experience as described, employer will accept a Bachelor's degree or equivalent in Computer Science, Computer Engineering, Engineering, or related field plus 5 years of experience in the position offered or 5 years experience developing applications. 40 hrs/wk. Must have legal authority to work in the U.S. Send resume and cover letter to Dr. Dalton McAfee, Alcorn State University, 1000 ASU Drive, #479 Lorman, MS, 39096.

Consultant sought by NYC Computer Consulting firm to analyze user needs, to dsgn, dvlp & implmt medium to large scale applics using technologies such as Lotus Notes, Lotus Script, Java, Java Script, J2EE, HTML, XML, CSS, VB, OLE/COM, ActiveX. Must have BS in Comp Sci or Engg or related or equiv w/relevant work exp. Resume to Gemini Systems, HR #1CEL, 61 Broadway, Ste 925, NY, NY 10006.

We have openings or the following positions to work at client sites throughout the United States. Send Resumes to: Webilent Technology Inc, 259A Main St. Suite #5 Nashua, NH 03060

For all posiitons require minimum of M.S. in Computer Science, Engineering or related field or B.S plus five years of relevant experience.

Senior Java Software Enginner: Providing software expertise and leadership to a team which maintains and develops improved interfaces for new and existing mission critical applications. Design and develop software applications using Java, JDBC, J2EE Websphere, Tomcat and XML. Perform object-oriented methodologies andproblem diagnosis. Senior .NET Software Engineer: Design, develop and test software applications using SQL, Server, VB, ASP, .NET and Crystal Reports. Involved in trouble shooting, query optimization,testing and production support. Lead a team of programmers to implement theapplication. Participate in internal program reviews., Manage and mentordevelopment staff. Ensure development is completed according to department-policies and procedures.

Senior Mainframe Software Enginner:
Analyzing the business needs, Preparing the technical specifications and testing the application using Cobol, DB2, CICS, FileAid and MVS/ESA. Must be able to work on performance efficiency, Troubleshoot and production support. Lead a team of programmers to implement the application.

Senior Oracle Software Enginner:
Design, develop and customize oracle applications using Oracle, Forms, Reports, stored procedures and PL/SQL. Solving System issues. Provide design recommendations to assist in generating requirements and improving performance and reliability of existing and new software. Lead a team of programmers to implement the application.

Senior Unix Administrator:
Perform analysis and proposal of system hardware, software, and system solutions for centralized HP-UX, AIX and NT enterprise-class computing platforms, running software applications in an Oracle environment. Lead a team of systems programmers to implement the application.

Senior SAP Software Enginner:
This position involves configuration of WM, MM, and TF Technology implementation. Lead the development team and integration effort for the implementation of Contracts business processes in SAP R/3 Sales and Distribution (SD). Propose technical solutions and ensure fit with Enterprise Architecture guidelines.Hands on experience using SAP modules like Material mangement and Sales and Distribution.

Senior QA Software Enginner:
Analyse, Design, develop and prepare the test scripts for the business applications in collaboration with systems engineer requirements and design process. WIll use the testing tools Winrunner, QTP and Test Director on Windows NT/Windows2000/UNIX operating systems. Lead a team of testers to implement the application.

Lead Database Administrator:
Mmanage a number databases for Development, Test and Production environments. Must be able to take ownership of issues, will be a key figure withing the team, and take the lead on resolving problems. Peer review of SQL / PLSQL for best practices will be undertaken as projects move through the development lifecycle.

Senior Software Engineer:
Interpret requirements, generate software design specifications, carry out effort estimation for new development, implement software modules in C/C++ or Java, conduct code and document reviews, perform unit testing of software modules, develop simulation and test tools, support system integration and field integration, maintain and support existing software modules and provide technical guidance to other team members.

SOFT. ENG. - R'sch, design, & implement tech. requirements for comp. software & web-based comp. apps. Req'd: MS in Eng'g. 2 yrs. exp. Exp. w/ Visual Basic, SQL, Oracle, XML, and HTML. Resumes: REFERENCE #011. Forest Labs. 500 Commack Rd. Commack, NY 11725.

COMPUTER

T&T Solutions, Canoga Park, CA seeks Software Engineers, Sr. Software Engineers, Systems Analyst, Oracle Apps., Technical Consultants etc. Salary commensurate w/education & exp. Fax resume to (818) 676-1272 or e-mail to jobs@ttsus.com c/o HR Dept.

Software Applications Developer

Design, develop & test a hosted service provided to financial services industry. Analyze requirements, evaluate existing systems & applications related to Internet systems & to devise state of art solutions to meet client's needs. MS in CS w/abil. to use C++, Visual Basic, HTML, Java Script, UNIX, XForms. Send resume to Dr. Vijay Sankaran, President, Carte Solutions, Inc., 11725 Arbor Street, Ste. 310, Arbor 2 Building, Omaha, NE, 68144.

Network Systems Administrator required by Mortgage Service Company in Millbrae CA. Requires a Bachelor's Degree in Electronic Engineering or Computer Science or their foreign equivalent and two (2) years experience in job offered Must have certification as CCSA, CCNA and CNE. Send resume to: HR (Job Code NSA) Preferred Financial Group 112 Park Place, Millbrae, CA 94030.

Delight Consulting Services, LLC, an IT consulting co. has permanent positions open for Software Engrs & IT Consultants to dsgn & dvlp prgms & applics w/following skills or a combo thereof:

Technical Architects w/exp in J2EE Architecture, Weblogic, iPlanet, ERP Systems, SAS, PERL, XSL/XSLT, SOAP, LDAP, Selectica, XML, JAXB, JAXP, Object Oriented Dsgn & Dvlpmt methodologies & applied dsgn patterns.

Datawarehousing Consultants w/exp in performing ETL, dsgn exception-handling strategies & engage in performance tuning of d/bases. Work w/Informatica, Powerconnect, SAPBW, Cognos, Reportnet & Metrics/ Framework.

Software Developers w/ Database Dsgn, Administration, Tuning & Data Modeling skills. Exp in dvlpmt & implmtn of ERP solutions using Oracle Applics 10.7SC/11i, Oracle Dsgnr, Oracle Applic Server, Oracle Workflow, Oracle Jdvlpr, Oracle Toplink, Unix Shell Scripting, PVCS. Websphere 4.x/5.x, J2EE, DB/2 WinRunner, LoadRunner, & Rational Robot. Candidates must be able to analyze reqmts, prep test plans, test cases, & scope documents. Candidates are reqd to perform s/ware deployments, maintain code & trouble-shoot.

Must have MS/BS in Comp Sci, Engg, Math or Business. Exp reqd varies from 1-5 yrs in skills identified above. Competitive salary & benefits. Must be willing to relocate/travel to various unanticipated locs thoughout US. Resume to: HR Dept., P.O. Box 71006, Rochester Hills, MI 48307 or email to hr@delight-consulting.com

Compuware

At Compuware, you can put your IT experience to work while constantly developing new skills. We currently have the following nationwide opportunities:

- Business Analysts
- Database Administrators
- Network Administrators
- Product Sales
- Product Management/Support
- Programmers/Analysts
- Project Managers
- QA Analysts
- Software Developers/ Engineers
- System Analysts
- Technical Writers
- Web Developers
- Recruiting Manager

www.compuware.com/careers
Be sure to indicate the specific title and location you are applying for on your application letter. Send your resume, referring to ad #ITC071204, to: Compuware Corporation, Attention: Recruiting One Campus Martius Detroit, MI 48226. E-mail: ads@compuware.com. EOE

Software Engineer wanted by Software Development company in Whippany, NJ. Must have bachelors degree in Engineering or Computer Science. Must speak, read and write Korean. Please reply to: Attn. Kenneth Stertzer, HR Manager, Image Solutions, Inc., 100 South Jefferson Rd., Whippany, NJ 07981.

Software SE (Software Engineer) Ames, IA: Design, develop, implement and debug and maintain high-performance Visualization software on multiple operating systems and platforms using the C++ language on windows and UNIX platforms. Maintain graphics card certification process for various graphics systems available in the market. Design and implement visualization features for the TeamCenter Visualization line of products. Follow established in-house software engineering processes to produce, design and implementation documentation, review finished code, and manage code using industry standard source code management systems. Requires: Master's or equivalent in Computer Science or Computer, Mechanical, Biomedical Engineering or Computer Science or Computer Graphics. Employer will accept completion of course work except thesis for Master's degree as equivalent. 1 year experience in job offered or 1year experience as Software Engineer or Graduate Research Assistant using C or C++ and developing software on Windows Platforms. Requires 15 graduate credit hours in mechanical, electrical, computer, or biomedical engineering courses. Requires 12 credit hours in computer engineering or computer science, 6 of the 12 credit hours must be at the Graduate level, and must include at least one course in computer graphics. Salary: $ 64,056.00/yr. Work week: 40 hrs/wk; 8:00 a.m. to 5:00 p.m. Must have proof of legal authority to work in the United States. Send your resume to the Ames Workforce Development Center, 122 Kellogg Avenue, Ames, Iowa, 50010-0410. Please refer to Job Order Number: IA1101935. Employer paid advertisement.

Web Security Architect needed to plan, coord & implmt security measures for internet, intranet & extranet to regulate access to comp data files & prevent unauthorized modification, destruction or disclosure of info using Vasco Corp's SnareWorks, SnareWeb & OSF DCE. Resume to: Ambient Consulting, Attn: HR, 5500 Wayzata Blvd., #1250, Mpls, MN 55416. EOE.

Senior Application Developer: Dev. web based app. for Internet, Intranet, Extranet, & back office systems, using knowledge of both server side & client side dev. in RAD environ. BS in CS w/abil. to use COM, COM+, ASP, HTML, DHTML, JavaScript, XML, CSS1 & CSS2 tech., C, ASP.NET, n-tier app. (can be met w/1 college course or 6 mos. exp.). Must have certificates: Cisco Certi. Network Prof., Microsoft Certi. Solution Developer.NET, Microsoft Certi. Database Adm., Microsoft Certi. System Eng., & Sun Java Certi. Programmer. 40 hr/wk. 9-5. Send resume to: Mr. Henry M. Diller, CTO, Carroll White Advertising, One Ravinia Drive, Suite 200, Atlanta, GA 30346

Database Analyst IV for programming, designing and analyzing of Islet Transplant and CGMP information systems. F/T position in Miami pays market level salary. Applicants with Bachelor's degree in Comp. Science or MIS with 8 yrs rel. exp in the job offered including 2 years in a supervisory capacity, and proficiency in File Maker Pro Database systems send resumes only to M. Fernandez, DRI(R134) PO Box 016960, Miami, Florida 33101. University of Miami is a drug/smoke free workplace and EO/AA Employer.

SYSTEMS PROJECT ANALYST. 40 hrs per wk. Mon-Fri, 8 am-5pm. Masters degree plus 1 year experience or Bachelors degree plus 2 years of experience or equivalent experience can substitute for college education. Experience requirements and job entails design and development of applications using DB2, WebSphere Studio Application Developer, WebSphere Server, MVS, Linux, Oracle and SQL Server. **Resumes only to: Robbie Stroud, Florida Department of Financial Services, 200 East Gaines Street, Suite 112-C, Tallahassee, FL 32399-0314. Resumes must be received by March 4, 2005. **Preference shall be given to veterans & spouses of veterans as provided by Chapter 295, FL Statutes. EEO/AA Employer.**

Data Communications Engineer New York co. seeks Data Comm. Eng. Min 2 yrs network design, security, install, admin. Working knowledge Wireless LAN, Switches, Hubs, Routers, Bridges, Firewalls. Proficient Win & Exch. 2003 Server, Double Take, VBScript, MS SQL, Data Modeling, Analysis, Design. B.S. Comp. or Elec. Eng. or foreign equivalent required, Fax resume to IT by Design 646-201-9536. EOE

Project Manager sought by NYC Computer Consulting firm to dsgn, dvlp & implmt business applics using s/ware technologies such as Java, JDBC, J2EE, XML, XSLT, SQL, Oracle, UML, TCP/IP & mgmt technologies such as Rational Unified Process & eXtreme Programming. Must have MS in Comp, Electrical or Info Systems Engg or related w/3 yrs relevant work exp. Resume to Gemini Systems, HR #1AW, 61 Broadway, Ste 925, NY, NY 10006.

Online Recruitment Opportunities

IT Careers' online network represents a comprehensive job-seeking destination that attracts highly qualified IT professionals.

- Corporate Memberships
- Job Posting Packages
- Resume Database
- Single Job Posting
- Integrated print & online packages

Post your recruitment or branding message on ITCareers.com today!

IT|careers
800-762-2977
Powered by, Career Journal.com

Featured Editorials

IT|careers

IT Careers offers you information on the most relevant career management topics relative to IT recruitment.

Here's what's coming up next:

March 14:
IT's #1 Career Choice

March 28:
Financial Services

Be sure to take advantage of this great opportunity to brand your company or display your recruitment message in IT Careers amid these specialized editorials

Contact us:
800-762-2977

Visit us at:
www.itcareers.com

Powered By:
Career Journal.com — THE WALL STREET JOURNAL

SENIOR MEMBER TECHNICAL STAFF

Thomson Inc. - a developer and manufacturer of consumer electronics products seeks a qualified Senior Member Technical Staff (Hardware Engineer, DIRECTV, and DVD Set Top Boxes) for its Indianapolis facility. Must have Bachelor's degree or equivalent in Electronics, Communications, Electrical Engineering or related field, plus 5 years in the position offered or 5 years in Electronics and Communications engineering. Salary and benefits commensurate with experience. Send resumes to: Thomson, Inc. Attn: Human Resources - Job # 8888, 10330 North Meridian Street, Indianapolis, IN 46290-1976.

SENIOR MEMBER TECHNICAL STAFF

Thomson Inc. - a developer and manufacturer of consumer electronics products seeks a qualified Senior Engineer for its Indianapolis facility. The Senior Engineer is responsible for developing methodologies and selection of integrating tools to assist in the development of standard cell IC layouts. In addition, the Senior Engineer utilizes both internal and external CAD tools to follow design rules and layout methodology to completed standard cell IC designs layouts. Must have Master's degree or equivalent in Computer Engineering, Electrical Engineering or related field, plus 3 years in the position offered or 3 years in modern IC design engineering and RTL coding. Salary and benefits commensurate with experience. Send resumes to: Thomson, Inc. Attn: Job # 9000, 10330 North Meridian Street, Indianapolis, IN 46290-1976.

MEMBER TECHNICAL STAFF

Thomson Inc. - a developer and manufacturer of consumer electronics products seeks a qualified Senior Engineer for its Indianapolis facility. The Senior Engineer is responsible for the design, implementation, review, debug and test of real-time embedded software for satellite receiver systems (Direct TV product line) used to receive digital television broadcast over the satellite channel for communication. In addition, the Senior Engineer utilizes latest technologies and tools available in real-time systems environment to develop high quality software modules, protocols, drivers and interfaces for sub-systems. Must have Master's degree or equivalent in Electronics and Communication Engineering, Computer Engineering or related field, plus 2 years in position offered or 2 years in Embedded system design and development. Salary and benefits commensurate with experience. Send resumes to: Thomson, Inc. Attn: Human Resources - Job # 9001, 10330 North Meridian Street, Indianapolis, IN 46290-1976.

MEMBER TECHNICAL STAFF

Thomson Inc. - a developer and manufacturer of consumer electronics products seeks a qualified Senior Engineer for its Indianapolis facility. The Senior Engineer will be responsible for the design documentation, coding, testing, debugging, integrating and maintaining real-time software for satellite-based embedded systems. Must have Master's degree or equivalent in Electrical or Computer Engineering or related field, plus 2 years in position offered or 2 years in Embedded systems, real-time operating systems, microprocessors and writing device driver software in C. Salary and benefits commensurate with experience. Send resumes to: Thomson, Inc. Attn: Human Resources - Job # 9002, 10330 North Meridian Street, Indianapolis, IN 46290-1976.

SENIOR SOFTWARE ENGINEER to design, develop, implement and maintain complex enterprise wide applications using object oriented technologies, Java, J2EE, Coolgen, C++, Interwoven, Visual Age for Java, Web Sphere, WSAD, Rational Rose, UML, SNA Server, QA Run, PVCS, MS Project, Erwin, CICS and Oracle on AS/400 and UNIX platforms; Supervise and mentor junior programmers and engineers. Require: B.S. degree in Computer Science, an Engineering discipline, or a closely related field with 5 yrs of progressively responsible exp in the job offered or as a Programmer/Systems Analyst or Programmer. Extensive travel on assignment to various client sites within the U.S. is required. Competitive salary offered. Apply by resume to: Vishy Dasari, President, Objectnet Technologies, Inc., 1117 Perimeter Center West, #E-104, Atlanta, GA 30338; Attn: Job MM.

A position is available for a Technical Account Manager - Partnerships in Atlanta, Georgia with a company that develops solutions for emerging technologies. The Technical Account Manager - Partnerships will be primarily responsible as the technical point of contact for joint sales opportunities for Jacada's world wide partners. Specific responsibilities include defining corporate strategies in relation to partner integration and analyzing new technologies and cost parameters for joint marketing events. Candidates for this position should possess at least 1 year's experience in customer support including the following technical skills: HTML, Java, Visual Basic, and web programming. Apply with resume by mail to: Craig Hardesty Jacada Inc., 400 Perimeter Center Terrace, Suite 100, Atlanta, Georgia 30046

SAP consultants and Programmer Analysts for Charlotte, NC office. SAP CONSULTANTS: Design & Implement software applications to support MM/ FICO/HR/QM/ PP/SEM/BW/ SD modules in SAP R/3 environment using ABAP/4,BAPI, ALE, LSMW, CATTS, ITS, BDC, DCOM, RFC, Oracle, IDOCS, Data Interface, User Exits, SMARTFORMS, C++, Perl & Shell scripting. Bachelors or Equivalent req'd in Computers, Engineering, Math or related field of study + 2 yrs of related experience. PROGRAMMER ANALYSTS: Develop software applications using VB, Crystal Reports, Delphi, ASP, XML, Coolgen, Interwoven; Develop client/server applications in Oracle, PL/SQL, Developer 2000 & Designer 2000. Bachelors or Equivalent req'd in Computers, Engineering, Math or related field of study + 2yrs of related exp. Must have legal authority to work permanently in the U.S. Send resumes to HR Manager, Masterminds Global Solutions, LLC, 6000 Fairview Road, #1200, Charlotte, NC 28210.

ATTENTION:
Law Firms
IT Consultants
Staffing Agencies

Place your Labor Certification ads here!

Are you frequently placing legal/immigration advertisements? Let us help you put together a cost effective program that will make this time-consuming task a little easier

Contact: Danielle Tetreault at: 800-762- 2977

IT|careers

INFRASTRUCTURE ANALYST, Charlotte, N.C.: Design, implement and maintain local area network (LAN), wide area network (WAN), and Novell networks and Cisco router switches; maintain and administer Unix and Sun systems utilizing Unix shell scripts; install, maintain, troubleshoot, and support Genesys Call Center using Genesys software; install, maintain and support the call center using computer and telephony component integration technologies; identify, analyze, and devise solutions to communicate infrastructure system problems; interact with customers regarding distributed computing and communication needs. Requires Bachelors degree in Electronic Engineering or Computer Science, or its foreign equivalent. Requires four (4) years in job offered or four (4) years in designing and maintaining LAN, WAN, and Novell networks and Cisco router switches. Salary: $82,576/year; 40 hrs/wk, 8AM to 5PM, Mon-Fri. To apply, submit resume to Employment Security Commission, 500 West Trade Street, Charlotte, North Carolina 28202. All resumes must include social security number, Job Order # NC2653578 and DOT Code 030.062-010.

SENIOR SOFTWARE ENGINEER to design and develop low level telephony functions of a predictive dialer under Linux operating system using C in T-1 and E-1 ISDN, Robbed Bit/CAS and analog telephony networks; Design and implement a multi-vendor telephony server based on various hardware models including Dialogic DM-3 cards, Aculabcards and PIKA hardware; Mentor junior programmers and engineers. Require: B.S. degree in Computer Science, an Engineering discipline, or a closely related field with 5 yrs of progressively responsible exp in the job offered or as a Programmer/ Analyst. Competitive salary offered. Apply by resume to: Sara Andrews, Noble Systems Corporation, 4151 Ashford Dunwoody Road, Suite 550, Atlanta, GA30319; Attn: Job TH.

Need five Senior Software Engineers to analyze, design, develop, test, maintain, implement and support web-based application software in a client/server environment using Java, J2EE, EJB, XML, XSLT, JMX, Oracle, Eclipse, UML, Jboss, WebSphere, WebLogic and Rational Rose, under UNIX and Windows platforms. Require: BS Degree in Computer Science, an Engineering discipline, or a closely related field with five years of progressively responsible experience in the job offered. Master's degree in the appropriate field will offset 2 years of experience. Extensive travel on assignments to various client sites within the US is required. Competitive salary offered. Apply by resume to Ravi Kandimalla, President, Everest Computers, Inc., 875 Old Roswell Road, Suite E 400, Roswell, GA 30076. Attn: Job EVGA.

SOFTWARE ENGINEER to design, develop, implement, support and maintain application and systems software in a client/server environment using Object Oriented techniques, C, C++, Java, TCP/IP, Sockets, Threads, SQL and Oracle under UNIX and Windows NT/2000 operating systems. Require: M.S. degree in Computer Science or a closely related field with 2 yrs of exp in the job offered or as a Software Consultant. Extensive travel on assignment to various client sites within the U.S. is required. Competitive salary offered. Apply by resume to: Vishy Dasari, President, Objectnet Technologies, Inc., 1117 Perimeter Center West, #E-104, Atlanta, GA 30338. Attn: Job CG.

Software Visioneer LLC is seeking Software Developers (4 Positions) and Database Engineers (2 Positions) for Northfield, IL. Software Developers: Candidates will maintain and enhance applications for Taft-Hartley regulated retirement funds using knowledge of multi-employer trust funds, contribution accounting, diversified pension planning, actuarial rules and reciprocal contribution processing. Will use knowledge of ERISA and HIPPA laws and regulations, and interface programming experience with ACCPAC, MAS 90 and Vitech Systems to perform duties. Will use following to complete assignments: a) Windows, DOS, VAX/VMS, Solaris, Linux operating systems and platforms. b) VAX BASIC, Visual Basic, VBA, VBScript, VB.net, C++, C#, Powerbuilder, WAP and Unix Shell scripting languages; c) TCP/IP, Winsock, SMTP, POP3, HTTP and FTP Protocols; d) Databases: Oracle, SQLServer, VAX DM, Pervasive; e) Benthic, PVCS, Sourcesafe, MS Project, Visio, Seagate Crystal Reports, Sharepoint Portal, MS Business server tools; f) Architectures: DNA, Web Services and Distributed Systems architectures, workflow oriented systems. Will develop and maintain Illinois Department of Revenue (IL-DOR) approved wholesale liquor tax reporting software using knowledge of IL-DOR communication protocols. Database Engineer: Candidates will design architecture, configure, tune and maintain databases of Taft-Hartley regulated retirement funds using knowledge of multi-employer trust funds, diversified pension planning, contribution accounting, actuarial rules and reciprocal contribution processing. Will use knowledge of ERISA and HIPPA laws and regulations, and interface programming experience with ACCPAC, MAS 90 and Vitech Systems to perform duties. Will use following to complete assignments: a) Windows, DOS, VAX/VMS, Solaris and Linux platforms; b) Databases: Oracle, SQL Server, VAX DM, Pervasive; c) TCP/IP, Winsock, SMTP, FTP and HTTP protocols; d) SQL, PL/SQL, T-SQL, Windows Shell Scripting and Unix Shell Scripting languages; e) Benthic, SourceSafe, MS Project, Visio, Sharepoint Portal, MS Business Server tools; f) Architectures: DNA, Distributed systems and Workflow systems. Will also develop and maintain databases of Illinois Department of Revenue (IL-DOR) approved wholesale liquor tax reporting software. Please send resumes to 4236 Commercial Way, Glenview, IL 60025 or fax to (312) 896-9439 or email resumes to jobs@vsnr.com

Data System Programmer-Design & develop an unemployment insurance & payment processing appl based on existing mainframe systems currently in place for State of SD. Rewrite monetary determination process to improve efficiency & reduce manual process. Design, develop & deploy a new web-enabled appl interface so that general public can file new & additional claims through the internet. $40K/yr, 40hpw, 7:30am-4:30 pm. Bachelor's degree in Comp Sci, EE or related field or equiv foreign degree. 1-yr exp in the job offered or as a Sfware Engr or 1-yr exp with each of the following: Systems development methodology, HTML, CSS, JavaScript, VisualStudio.net, ADO.net, T-SQL & SQL-2000. Must be willing to t! ravel & relocate if necessary. Submit resumes to: South Dakota Career Center, 420 South Roosevelt, PO Box 4730, Aberdeen, SD 57402-4730, Tel: 605-626-2340, Fax: 605-626-2228. Pls reference to Job Order No. SD 1273385.

Programmer Analyst. Multiple Positions. Develop new and modify existing applications using Oracle Developer and Designer Tools on SCO UNIX, IBM, AIX, DG/UX, Sun, Digital UNIX, Windows NT and Windows 9x platforms. Draft requirements specifications, physical and logical design specifications, and other analytical documentation in support of new product design and existing product modifications development activities. Troubleshoot, isolate, and correct software defects. Draft systems and user documentation in support of modifications and new applications development. Provide level III technical support to Tomax customers and internal support engineers. Requires BS degree or equivalent in Computer Science or related field and 2 years Oracle development experience as Programmer Analyst. Must have hands on development experience with Oracle Developer and Oracle Designer tools in UNIX and Windows environment. Salary $60,000.00 to $65,000.00 per year. Send resume to Department of Workforce Services, Attn. Erlinda Anderson, Job Order #8172166, 140 E. 300 S., SLC UT 84111

Computer

As an industry leader, we are able to provide our people with the kind of work environment others can't match. We are looking for the following IT professionals with >1 year experience, in our New York, New Jersey and Pennsylvania offices:

- PROGRAMMER/ ANALYST
- SYSTEMS ANALYST
- DATABASE ADM.
- DATABASE ANALYST
- LAN/WAN ADM.
- SOFTWARE ENGINEER
- WEB DEVELOPER
- DATA WAREHOUSING ARCHITECT
- BUSINESS ANALYST
- SOLUTIONS SALES EXECS
- QA/TESTER
- TECHNICAL RECRUITER

Needed skill sets: CLIENT/SERVER, ERP-SAP, ORACLE, PEOPLESOFT, INTERNET, E-COMMERCE, MID-RANGE, AS/400, CRM - SIEBEL, DATA MODELING.

For consideration please reference Job Code: RIRCW17 and email to: recruit@rcgit.com. We are an Equal Opportunity Employer. M/F/D/V.

www.rcgit.com
RCG Information Technology

SOFTWARE ENGINEER to design, develop, test and maintain web-based custom applications using Java, XML, Crystal Reports, J2EE, Java Components, WebLogic, WebSphere, Oracle, JD Edwards One World XE, DB2, Mercury Tools and Web Focus under Windows NT/2000 operating systems. Require M.S. degree in Computer Science/Engineering, or a closely related field with 1 yr of exp in the job offered or as a Programmer/Analyst. Competitive salary offered Apply by resume to: Dave Bloomquist Global Software Development Services, Inc.,10 South 5th St. Ste 700, Minneapolis, MN 55402. Attn: Job NT

Ads Placed Weekly

Didn't find the IT Career Opportunity you were looking for?

Check back weekly for fresh job listings placed by top companies looking for skilled IT professionals like you!

IT|careers
800-762-2977

How to Contact COMPUTERWORLD

We invite readers to call or write with their comments and ideas. It is best to submit ideas to one of the department editors and the appropriate beat reporter.

Don Tennant, editor in chief (508) 620-7714

Mitch Betts, executive editor (301) 262-8243

Julia King, executive editor, events (610) 532-7599

DEPARTMENT EDITORS

Craig Stedman, News editor (508) 820-8120
Mike Bucken, assistant News editor (508) 820-8562
Tommy Peterson, Technology editor (508) 620-7729
Kathleen Melymuka, Management editor (508) 820-8118

REPORTERS

Matt Hamblen, networking; mobile/wireless; network/systems management (508) 820-8567
Heather Havenstein, business intelligence; application development; Web services; application server software; health care (919) 233-7776
Thomas Hoffman, IT management and investment issues; careers/labor; energy industry (845) 988-9630
Lucas Mearian, storage; disaster recovery and business continuity; financial services industry (508) 820-8215
Linda Rosencrance, general assignment; transportation and automotive industries (508) 628-4734
Carol Sliwa, Windows; Linux; RFID; retail industry (508) 628-4731
Marc L. Songini, ERP; supply chain; CRM; databases; food and agribusiness (508) 820-8182
Patrick Thibodeau, enterprise systems; Unix; outsourcing and immigration; antitrust issues (202) 333-2448
Jaikumar Vijayan, corporate security/privacy issues; manufacturing industry (630) 978-8390
Todd R. Weiss, general assignment; open-source community; intellectual property issues; messaging/collaboration (717) 560-5255

OPINIONS

Frank Hayes, senior news columnist (503) 252-0100

FEATURES

Ellen Fanning, special projects editor (508) 820-8204
Robert L. Mitchell, senior editor (508) 820-8177
Mark Hall, editor at large (503) 391-1158
Gary H. Anthes, national correspondent (703) 536-9233
Julia King, national correspondent (610) 532-7599

COMPUTERWORLD.COM

Martha Connors, vice president/general manager (508) 820-7700
Sharon Machlis, managing editor/online (508) 820-8231
Ken Mingis, online news editor (508) 820-8545
Marian Prokop, online editor at large (508) 620-7717
David Ramel, e-mail newsletter/online editor at large (508) 820-8269
John R. Brillon, associate art director (508) 820-8216
David Waugh, associate art director (508) 820-8142

Jennifer Norris, senior Web producer
Peter Smith, Web development manager
Kevin Gerich, Mark Savery, Web developers

RESEARCH

Mari Keefe, research manager
Gussie Wilson, research associate

COPY DESK

Michele Lee DeFilippo, managing editor/production (508) 820-8126
Bob Rawson, assistant managing editor/production (508) 271-8015

Mike Parent, Monica Sambataro, senior copy editors
Eugene Demaitre, copy editor

GRAPHIC DESIGN

Stephanie Faucher, design director (508) 820-8235

April O'Connor, associate art director
Julie Quinn, senior designer
Susan Cahill, graphics coordinator
John Klossner, cartoonist

ADMINISTRATIVE SUPPORT

Linda Gorgone, office manager (508) 820-8178

CONTRIBUTING EDITOR

Jamie Eckle, Opinions (617) 596-1873

CONTRIBUTING COLUMNISTS

Michael Gartenberg, Dan Gillmor, Paul Glen, Barbara Gomolski, Thornton A. May, David Moschella, Bart Perkins

CONTRIBUTING WRITERS

Mary Brandel, Stacy Collett, Russell Kay, Mary K. Pratt, Drew Robb, Steve Ulfelder

GENERAL INFORMATION

TELEPHONE/FAX

Main phone number . . . . (508) 879-0700
All editors unless otherwise noted below
Main fax number . . . . . . (508) 875-8931
24-hour news tip line. . . (508) 620-7716

E-MAIL

Our Web address is **www.computerworld.com.**

Staff members' e-mail follows this form: **firstname_lastname@computerworld.com.**

For IDG News Service correspondents: **firstname_lastname@idg.com.**

LETTERS TO THE EDITOR

Letters to the editor are welcome and should be sent to: **letters@computerworld.com.** Include your address and telephone number.

MAIL ADDRESS

PO Box 9171, 1 Speen Street, Framingham, Mass. 01701

SUBSCRIPTIONS/BACK ISSUES

Subscription rates: U.S., $99.99/year; Canada, $130/year; Central and South America, $250/year; all others, $295/year

Phone . . . . (888) 559-7327
E-mail . . . . cw@omeda.com
Back issues . . . . (508) 820-8167

REPRINTS/PERMISSIONS

Contact . . . . Renee Smith
Phone . . . . (717) 399-1900, ext. 172
E-mail . . . . reprints@computerworld.com

Visit **www.reprintbuyer.com** to obtain quotes and order reprints online.

COMPANIES IN THIS ISSUE

Page number refers to page on which story begins. Company names can also be searched at **www.computerworld.com**.

AOVANCED MICRO DEVICES INC. . . 12, 14
AFLAC INC. . . . 38
AGILITY HEALTHCARE SOLUTIONS . 10
ALINEAN LLC 18
AMERICA ONLINE INC. . . . 8
APPIO INC 7
ARBOR NETWORKS INC. 14
ARROW ELECTRONICS INC. . 39
ARTEMIS INTERNATIONAL SOLUTIONS CORP . 28
AT&T CORP . . 12, 28
BAUSCH & LOMB INC . . . 23
BAYLOR HEALTH CARE SYSTEM 1
BEA SYSTEMS INC . 12
GEARINGPOINT . 20
BETH ISRAEL DEACONESS MEDICAL CENTER 10, 19
BISYS INFORMATION SOLUTIONS 12
BOSTON UNIVERSITY SCHOOL OF MANAGEMENT 20
BT GROUP PLC 14
BURTON GROUP 23
BUYSAFE INC 8
CALIFORNIA HEALTH AND HUMAN SERVICES AGENCY 6
[illegible] 19
[illegible] SOFTWARE INC 23
[illegible] FINANCING 20
[illegible] CORP 6
[illegible] EXCHANGE INC 39
[illegible] INC 6
[illegible] INC 8, 12
[illegible] EXCHANGE 10
[illegible] MARKETS
[illegible] 8
[illegible]
[illegible] 39
COMPUTER ASSOCIATES INTERNATIONAL INC. . . 8
COMPUWARE CORP. . . . 8
CONTINENTAL AIRLINES INC. . . 1
CREIGHTON UNIVERSITY . . . 20
CUTTER CONSORTIUM . . . 38
OARTMOUTH COLLEGE . . . 7
OELL INC . . . 14
DELOITTE & TOUCHE LLP . . . 6
DELOITTE & TOUCHE USA . . . 7
DELOITTE CONSULTING LLP . . . 7
DIGITALHATCH INC. . . . 42
DOCUMENTUM INC. . . . 23
EBAY INC. . . . 8
ELK GROVE UNIFIED SCHOOL DISTRICT . 12
EMC CORP . . . 23
ENTERPRISE APPLICATIONS CONSULTING 7
EPIC SYSTEMS CORP . 1
FORRESTER RESEARCH INC. 8, 24
FUJITSU LTD 6
GARTNER INC. 33, 39
GE REAL ESTATE 1
GLEN RAVEN INC. 1
GROOVE NETWORKS INC. 23
HARVARO MEDICAL SCHOOL 19
HEALTHCARE INFORMATION ANO MANAGEMENT SYSTEMS SOCIETY 1, 10
HEWLETT-PACKARD CO 1, 8, 12, 14, 50
HVB AMERICA INC . 1
HVB GROUP . 1
HYDROCHEM INDUSTRIAL SERVICES INC 49
IBM 1, 6, 7, 8, 14, 40, 49
IDC 1, 16, 19
ILLUMINATA INC 7
INCOMIT SOFTWARE 12
INTEL CORP. 1, 14
INTERNATIONAL COMPUTER NEGOTIATIONS INC. . . . 40
IRON MOUNTAIN INC. . . . 43
JBOSS INC. . . . 1
JOHNSON & JOHNSON 20
JUPITER RESEARCH 21
KERR GROUP INC. . . . 49
KEYSTONE AUTOMOTIVE INDUSTRIES INC. . . . 38, 37
KIFERBAUM CONSTRUCTION CORP. . . . 42
L2 SOLUTIONS INC. . . . 8
LIBERTY ALLIANCE 8
LIPPIS CONSULTING 12
LOGICLIBRARY INC. . . . 28
LOTUS SOFTWARE GROUP . . . 49
LOYOLA UNIVERSITY 20
MCI INC. 12
MERCURY INTERACTIVE CORP. . . . 43
META GROUP INC. . . . 38
MICROSOFT CORP. . . . 6, 8, 36, 49
MOHEGAN SUN CASINO . . . 1
MPHASIS BFL LTD. . . . 14
MYSOL AB 1
NASOAQ STOCK MARKET INC. . . . 8
NET ENFORCERS INC. . . . 8
NETSCOUT SYSTEMS INC. . . . 8
NEW HORIZONS COMPUTER LEARNING CENTERS INC. . . . 1, 8
NEW YORK UNIVERSITY SCHOOL OF CONTINUING AND PROFESSIONAL STUDIES . 1
NIKU CORP . 8
NORTEL NETWORKS LTD 12
NOTRE DAME UNIVERSITY 49
NOVELL INC . 49
OGILVY RENAULT 8
ORACLE APPLICATIONS USER GROUP . 12
ORACLE CORP 1, 12, 39
OREGON STATE UNIVERSITY 49
PANGO NETWORKS INC . . . 10
PFIZER INC 10
PIONEER PETROLEUMS 49
PRESBYTERIAN HEALTHCARE SERVICES 10
PRINCETON CONSULTING LTD. . . . 14
PROLOGIS 49
PURDUE PHARMA LP 10
OUANTIVA INC. 8
QUEST INTERNATIONAL USERS GROUP 12
QWEST COMMUNICATIONS INTERNATIONAL INC. . . . 12
RED HAT INC. . . . 1, 49
RSA SECURITY INC. . . . 8
SAN ANTONIO POLICE OFFICERS ASSOCIATION . . . 7
SANS INSTITUTE 10
SAP AG 7
SAP AMERICA INC. . . . 7
SBC COMMUNICATIONS INC. . . 12
SECUREWAVE SA 8
SOUTHERN CO. . . . 38
SPRINT CORP. . . . 12
ST. LUKE'S HEALTH SYSTEM INC. . . 36, 37
ST. MICHAEL'S HOSPITAL 7
STATE STREET CORP. . . . 39
STEELCASE INC. . . . 23
SUN MICROSYSTEMS INC. . . . 8, 7
SYMANTEC CORP. . . . 8
SYMBOL TECHNOLOGIES INC . 10
TELLABS INC. . . . 35, 38, 37
TELOS CORP 10
TEXAS A&M UNIVERSITY . 12
THE APACHE SOFTWARE FOUNDATION 1
THE BISYS GROUP INC. . . 12
THE BOEING CO . 8
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY CO. . 12
THE CLEVELANO CLINIC FOUNOATION . 1
THE COMPUTING TECHNOLOGY INDUSTRY ASSOCIATION INC 1
THE EDGE CONSULTING GROUP LLC . 31
THE GUARDIAN LIFE INSURANCE COMPANY OF AMERICA . 38
THE SCO GROUP INC. 8
THE YANKEE GROUP 10
THOITS INSURANCE SERVICE INC. . . . 42
T-MOBILE INTERNATIONAL AG. . . . 14
TODD PACIFIC SHIPYARDS CORP. . . . 40, 42
U.S. OEPARTMENT OF ENERGY 10
U.S. DEPARTMENT OF HEALTH ANO HUMAN SERVICES 10
U.S. DEPARTMENT OF HOMELAND SECURITY 10
U.S. OEPARTMENT OF JUSTICE 10
U.S. DEPARTMENT OF THE INTERIOR . . . 10
U.S. OEPARTMENT OF TRANSPORTATION 10
U.S. ENVIRONMENTAL PROTECTION AGENCY . . . 10
U.S. FOOD AND DRUG AOMINISTRATION . . . 10, 19
U.S. SECURITIES AND EXCHANGE COMMISSION . . 8
UNISYS CORP. . . . 40
UNITED PARCEL SERVICE INC. . 38
UNIVERSITY OF OELAWARE . . . 20
UNIVERSITY OF MICHIGAN . . 20
UNIVERSITY OF PITTSBURGH 20
UNIVERSITY OF SAN DIEGO . . . 20
VERICHIP CORP . . . 19
VERITAS SOFTWARE CORP. . . . 6
VERIZON COMMUNICATIONS INC. . 12
VIEWPOINTE ARCHIVE SERVICES LLC 12
WYNDHAM INTERNATIONAL INC . 23
XANDROS INC. . . . 49
XINHUA NEWS AGENCY . . . 14
XIOTECH CORP 28
YAHOO INC. . . . 1

ADVERTISERS INDEX

Adobe 2-3
www.adobe.com
EMC 15
www.emc.com
Hewlett-Packard Blade Server 22*
www.hp.com
Hewlett-Packard Integrity 22*
www.hp.com
Hewlett-Packard Mobility 9
www.hp.com
Hewlett-Packard ProCurve 30
www.hp.com
IBM Automation 26-27
www.ibm.com
IBM Cross Server 41, 43
www.ibm.com
IBM Integration 25
www.ibm.com
Insight 17
www.insight.com
Microsoft Linux 13
microsoft.com/getthefacts
Mobile & Wireless World Conference 2005 44
www.mwwusa.com/cw
Oracle Corp. Data Hub 52
www.oracle.com
Oracle Corp. SeONE 4
www.oracle.com
Remedy a BMC Software company 19
www.remedy.com
SAP 11
www.sap.com
Siebel 34
www.siebel.com
SNW Best Practices in Storage Nominations 2005 18
www.snwusa.com
Sony 29
www.sony.com
Sun Microsystems 51
www.sun.com

*Regional Select Edition

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

Continued from page 1

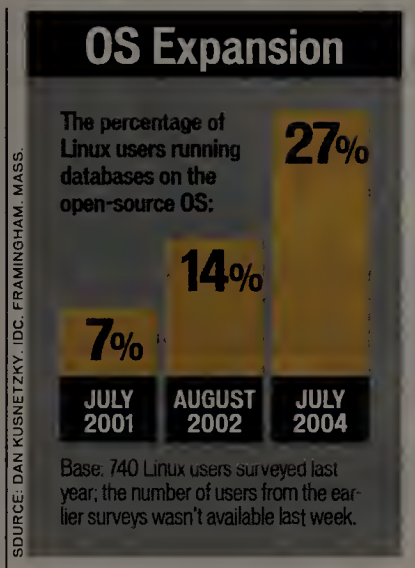
Linux

Linux servers are on the way for a disaster recovery site.

New enterprise Linux capabilities are also helping early adopters such as Yahoo Inc. venture into new terrain. The Sunnyvale, Calif.-based Internet hub already had "lots" of Linux servers running Yahoo services, databases, business intelligence software and reporting applications, said Mason Ng, Yahoo's director of engineering operations. He declined to provide the specific number.

But in December, Yahoo started to port its homegrown infrastructure applications from its custom operating system to Red Hat Enterprise Linux 4.0, which was in beta at the time and was released last week. Plans call for a gradual migration of more applications to Linux, but the timing and number will depend on how successfully the early work goes, Ng said.

He said the performance improvements and 64-bit support in the Linux 2.6 kernel fueled the decision to considering porting some of the applications. "From a performance and scalability standpoint, earlier versions of the kernel couldn't meet our requirements without heavy customization," he said.



Yahoo also expects to run more databases on Linux. Ng said the company currently has dozens of database instances on Linux, and he expects the number to double in the next 12 months. Yahoo isn't running any 64-bit databases in production on Linux yet, but it is testing them, Ng added.

MORE ONLINE

HP's Martin Fink says Linux has "become a brand" that users recognize and trust:

QuickLink 52642
www.computerworld.com

Continental Airlines Inc. began pushing the 64-bit database envelope last September when it went live with an automated ticket-reissue application. The system uses MySQL AB's open-source databases running on three four-processor HP DL585 servers. The open-source software stack also includes JBoss Inc.'s application server and the Apache Web server.

Michael McDonald, director of technology at Continental, said the Houston-based airline gained confidence in Linux after seeing continuous uptime of as much as 300 days while running it on development machines. Security patches could be applied and applications installed without bringing the system down or rebooting.

"We thought from a reliability perspective that the operating system was ready," McDonald said.

The new application replaced a manual process that took as long as 20 minutes for a ticket agent to complete. Customers are now able to get answers in seconds, McDonald said. The project has been so successful that Continental will consider Linux as it looks to partition its mainframe into subsystems and move some of the subsystems to distributed servers, he added. The mainframe runs IBM's Transaction Processing Facility software.

Analyst Al Gillen at IDC in Framingham, Mass., said the first wave of Linux adoption focused on Web servers, network infrastructure and file-and-print servers. But users are now "well into the second wave" of adoption for uses such as database servers, collaborative software and application workloads, he added. A third wave, which is "arguably beginning," focuses on server virtualization and provisioning of on-demand computing, Gillen said. **52705**

IBM Opens Wallet for Linux Client

BOSTON

Saying it thinks the time is right to offer users an alternative to Windows-based desktop applications, IBM last week announced plans to spend $100 million during the next three years to expand client-side Linux support in its Lotus Workplace collaboration software.

IBM said at the LinuxWorld Conference & Expo that it will invest the money in software development, testing and evaluation, as well as support of independent software vendors and indirect-channel marketing.

Overall demand for desktop Linux remains limited (see story below). But IBM's planned investment "really signifies our confidence that the client [market for Linux] is ready to take off," said Arthur Fontaine, a senior marketing manager at the company's Lotus Software Group. "It's kind of a lead-and-seed strategy."

As part of its initiative, IBM this quarter plans to integrate Workplace and its Notes messaging software so all tasks can be done in the same Workplace user interface. That capability will initially be supported on Windows but will be extended to Linux within the next year, Fontaine said.

Pioneer Petroleums, a gas station and convenience store chain in Burlington, Ontario, is waiting for Workplace Version 2.5 before it completes a rollout of the software to Linux-based PCs in its 150 stations, said Dale Sinstead, the company's director of information systems and technology. He added that Workplace 2.0.1, which supports Red Hat Linux, is being used on 25 Linux desktops.

Version 2.5 is due this quarter. Sinstead said he expects it to provide better performance, improved spreadsheet technology and better integration with IBM's Lotus Domino server.

– Todd R. Weiss and Carol Sliwa

Linux Struggles for Desktop Acceptance

BOSTON

One of the "birds of a feather" evening sessions at the LinuxWorld Conference & Expo was called "Year of the Linux Desktop . . . Again." And the consensus among the handful of nighthawks at the session was that this still won't be desktop Linux's year.

Vendors such as Red Hat, Novell Inc. and Xandros Inc. have high hopes for their desktop Linux offerings. But they can't point to many user success stories – certainly none on the scale of Linux server installations.

"There is a lot of interest [among users] in switching to Linux," said Stephen Harris, director of marketing at New York-based Xandros. "But are there a lot of examples of where they've gone out and done it? No."

Of more than 40 IT managers who were interviewed at LinuxWorld or who responded to a random e-mail and telephone poll during the past two weeks, none has plans to deploy desktop Linux on a large scale.

Only respondents from two universities indicated that they have more than a handful or isolated pockets of Linux desktops: Notre Dame University, at about 10% of its user population, and Oregon State University, at 5%.

Some companies said they have examined the prospect of moving to desktop Linux to assist in their contract negotiations with Microsoft Corp. Others are trying Linux in kiosks or for limited-function desktop systems.

Troy Backus, network manager at Kerr Group Inc. in Lancaster, Pa., said the bottle cap manufacturer has installed Linux-based human resources kiosks in the cafeterias at its eight manufacturing facilities. Kerr also asked the vendor of its production monitoring software to port the application's interface to Linux, Backus said. "I don't envision that desktop Linux is ever going to replace all my Windows machines," he said. "But there is a certain area within my manufacturing facilities where it's a perfect fit."

On the other hand, Neville Teagarden, CIO at ProLogis in Aurora, Colo., said adding another technology to the distribution services firm's desktop environment would likely lead to an increase in support costs that would outweigh any software license savings.

Linux is a difficult choice on the desktop because good development tools are lacking, said Joe Hartman, an application development manager at Hydro-Chem Industrial Services Inc. in Deer Park, Texas. "We use a lot of homegrown software that would have to be rewritten to go with Linux on the desktop," he said.

– Carol Sliwa

Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement #40063800. CANADIAN POSTMASTER. Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published weekly, except a single combined issue for the last two weeks in December by Computerworld, Inc., 1 Speen Street, Box 9171, Framingham, Mass. 01701-9171. Copyright 2004 by Computerworld Inc. All rights reserved. Computerworld can be purchased on microfilm and microfiche through University Microfilms Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Computerworld is indexed. Back issues, if available, may be purchased from the circulation department. Photocopy rights: permission to photocopy for internal or personal use is granted by Computerworld Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $3 per copy of the article, plus 50 cents per page, is paid directly to Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Reprints (minimum 100 copies) and permission to reprint may be purchased from Renee Smith, Computerworld Reprints, c/o Reprint Management Services, Greenfield Corporate Center, 1808 Colonial Village Lane, Lancaster, Pa., 17601, (717) 399-1900, Ext. 172. Fax (717) 399-8900. Web site: www.reprintbuyer.com. E-mail: reprints@computerworld.com. Requests for missing issues will be honored only if received within 60 days of issue date. Subscription rates: $5 per copy; U.S. – $99.99 per year; Canada – $130 per year; Central & So. America $250 per year; Europe – $295 per year; all other countries – $295 per year. Subscriptions call toll-free (888) 559-7327. POSTMASTER: Send Form 3579 (Change of Address) to Computerworld, PO Box 3500, Northbrook, Ill. 60065-3500.

FRANK HAYES ▪ FRANKLY SPEAKING

Life After Carly

A READER WRITES: "Say, hypothetically, a person was to work at Hewlett-Packard — here's how I'd imagine people would be feeling right now: Everyone at HP is *so* demoralized that after all these cost cuts, stealth layoffs, expense and travel reductions, no raises for years, no bonuses, here Carly walks away with all this money after basically running HP into the ground. It's hard to stay motivated under these conditions. Oh well, I'm thinking, tap me on the shoulder for that workforce reduction — I'll take the severance, the unemployment, and have a nice rest."

Y'know, friend, your hypothetical severance package is *not* going to be quite as good as Carly Fiorina's $21.4 million, plus financial counseling, legal and outplacement services, six months of secretarial services, a year of home security — and she gets to keep her PC, too. That hypothetical tap on your shoulder may not be all it's cracked up to be.

So what *should* you do, whether you work at HP or not? Hypothetically, I mean?

First, forget Carly (and all the other overpaid, underperforming CEOs out there). OK, damn her for a day and then forget about it. Tell yourself that $21 million is a microscopic fraction of HP's annual revenue. Calculate how many engineers that golden parachute would pay for (maybe 200 for a year, another drop in the bucket). Figure out what you'd do with the $140 that would be your share if they just gave it to the employees instead of to her.

Then forget her. She's gone. At least she won't do any more damage.

Next? Update your résumé. Not just because you might get laid off, not because you might quit. The best part of rebuilding your résumé is to remind yourself where you've come from, what you've accomplished and what your goals are. However miserable things feel now, this is stuff no one can take away from you.

Besides, it's an excuse to revisit both the best and worst jobs you've had — to remember the atrocities and the good times. That's always good for perspective.

Then ask some hard questions. What do you want to do? Can you do it in your current job? Never mind whether other people think you have a great job, whether the job market stinks or how the numbers add up. If you can't accomplish what you want to do where you are, you're a short timer, and you should start looking for a place where you *can* accomplish it.

You probably won't find that place tomorrow. Maybe not before you're laid off. But now's the time to start looking.

On the other hand, if you can see yourself reaching some of those goals where you are now, how can you make that happen? *Can* you make it happen?

It might be unlikely. Trying to make it a reality might turn you into a prime candidate for the next round of layoffs as a boat-rocking troublemaker. But in that case, you get the package and the unemployment and the hypothetical nice rest, right? And if things come together instead, you get the job you wanted.

For the next few months, HP is going to be in limbo, waiting for a new CEO. You don't want to spend months in limbo. Start asking questions and making plans.

Finally, think about this: HP people — like most IT people — are engineering people. Engineers hate uncertainty. They want to be able to calculate the maximum stresses and then overdesign by 50% so they can stop worrying about things collapsing and get on with the next project.

But right now, HP is underengineered. It really does have stress points that may not be able to handle a sudden change. And it won't be out of danger from unexpected overstressing anytime soon.

I know, that's no comfort. But it may explain why you'll continue to be so uncomfortable if you stay.

And maybe even if you go.

Hypothetically speaking, of course. 52682

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at frank_hayes@computerworld.com.

Unclear on the Concept

Consultant pilot fish gets a holiday call for help from a client. A minicomputer system disk failed and had to be replaced, and now the operator needs help restoring from backups. So what's the problem? fish asks. "The backups are in the safe," operator says. "The system manager is the only person who knows the combination, and he's on two weeks' vacation, and there's no way to reach him."

SHARK TANK

Just the Fax, Ma'am

The new fax server will convert all types of documents for faxing, whether they're generated by Word, Excel or any specialized software, pilot fish explains to users. But the first day it's deployed, one user calls to say she doesn't know if she can use it, asking, "How are we going to know who has the same programs to view what we are faxing?"

Still Not Write

User calls IT help desk complaining that his CD drive isn't working. Pilot fish: What's it doing or not doing? User: "It won't allow me to save data to it." Puzzled fish: You mean your *floppy* drive won't work? User: "Not my floppy drive, my CD drive with my CD in it." Fish: You can't save data to a CD unless you have a CD burner. User: "Oh, it should work anyway. I have a writable CD in the drive."

NEVER MInd!

Pilot fish gets heated e-mail from manager asking, "Who changed my password?" Fish walks him through log-in process over the phone. It fails. Check the Caps Lock key, fish suggests. "Oh! Never mind!" says manager. A few weeks later, same manager is again furious because he can't log in. This time, fish suggests typing the password into Notepad to make sure it's right. Again: "Oh! Never mind!" Sighs fish, "To date, he's asked the same question six times. Each time, I salvage his ego by coming up with a new way to ask, 'Did you check Caps Lock?' "

They're Baaaack!

This pilot fish works for an outsourcer doing system-level support. One client is shared with an overseas competitor that handles application-level support. But the app-level support is lousy, and fish can't take it anymore. "I documented all the expense the customer was incurring due to their poor support," fish says. "After a presentation, I was pleasantly surprised to hear that the client terminated the overseas support contract in favor of my company. But during my next painful on-call, I realized that my new app-level support people were the same ones as before. My company had bought this overseas provider."

LOOK, IT'S SIMPLE: You send me your true tale of IT life at **sharky@computerworld.com**. I send you a stylish Shark shirt if I use it. And check out the daily feed, browse the Sharkives and sign up for Shark Tank home delivery at **computerworld.com/sharky**.

What would you do with a 10,000 CPU grid?

Pay $1 to find out.

Sam, don't lock them in. Get on Solaris™ 10!

Introducing the *Sun Grid* for $1/cpu-hr. The network is your computer.

If you're paying more than $1/cpu-hr to build and run your own grid, you're overpaying. Because that's the price at which our grid is available to you. Pay $1/cpu-hr, and leverage our capital spend, SPARC® or x86 computers, storage, and facilities to run your business. From Monte Carlo simulations to reservoir simulation. Protein modeling to movie rendering. 1 cpu to as many as you could conceive. No minimum commitment, no maximum. Stretch your dollar at sun.com/sungrid

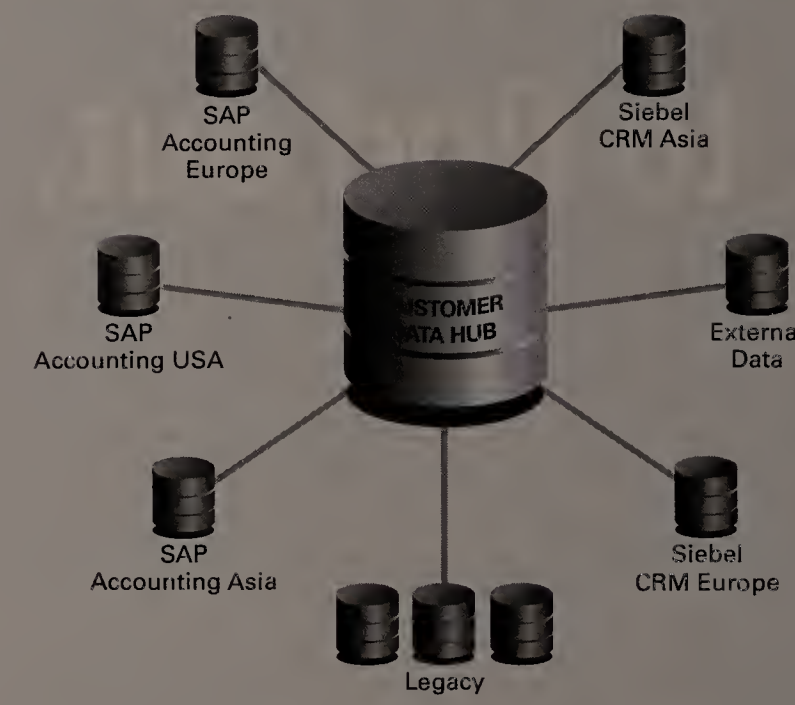
Sun microsystems
The Network is the Computer

solaris Java

©2005 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, SOLARIS, THE SOLARIS LOGO, JAVA, THE JAVA LOGO, AND THE NETWORK IS THE COMPUTER ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE UNITED STATES AND OTHER COUNTRIES. ALL SPARC TRADEMARKS ARE USED UNDER LICENSE AND ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SPARC INTERNATIONAL, INC. IN THE UNITED STATES AND OTHER COUNTRIES.

Oracle Customer Data Hub

All Your Customer Data In One Place



All your applications can share consistent customer data in real time.

ORACLE®

oracle.com/datahub
or call 1.800.633.0940

Copyright © 2005, Oracle. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.